

IFEAT WORLD

INTERNATIONAL FEDERATION OF ESSENTIAL OILS & AROMA TRADES
NEWS FROM AROUND THE GLOBE • SEPTEMBER 2015

Welcome to Colombo!



SRI LANKA
27 SEP - 1 OCT 2015
CINNAMON GRAND COLOMBO

2015 IFEAT Conference, 27 September - 1 October



Devapriya Nugawela

I am delighted to welcome delegates and their accompanying persons to the 2015 IFEAT Conference in Colombo, capital city of the beautiful island country of Sri Lanka. As you will discover, my country is an ideal location for the prestigious annual IFEAT event. It is a diverse and multi-cultural country with strong international links around the world. Our culture dates back over 2,500 years and the country has a strong democratic tradition, of which we are proud.

We hope you enjoy our hospitality in all its forms, and have a wonderful stay.

Known by many as the "Spice Island," Sri Lanka's diverse landscape suits a variety of important crops for the essential oils industry. Its most famous spice, true cinnamon (*Cinnamomum zeylanicum* or *Cinnamomum verum*) is exported in many different forms including cinnamon leaf oil and cinnamon bark oil (see page 8). Other important export crops include pepper, nutmeg, cloves and cardamom, as well as the world-renowned tea. Sri Lanka has the highest biodiversity density in Asia and is one of the 25 recognised "biodiversity hotspots" in the world. I hope you will have time to leave Colombo to appreciate the flora and fauna of Sri Lanka, of which, astonishingly, over 20% is endemic.

We are also very pleased to welcome all those presenting papers or running workshops at this year's IFEAT Conference. The overall theme is "**Asia – Source of essential oils and medicinal plants**", and a fascinating range of topics will be covered over the week, which should expand our knowledge and understanding of the complex and exciting flavour and fragrance industry. Developments in production and marketing of our products continue to offer so much potential in today's global marketplace.

My colleagues on the Local Organising Committee and I look forward to meeting many of you personally during the conference week.

With best wishes for an enjoyable 2015 IFEAT Conference.

Devapriya Nugawela

Chairman, Sri Lanka Conference Committee

A few statistics on Sri Lanka

- Area: 65,610 sq km
- Population: 22.1 million
- GDP (ppp): \$217.1 billion
- GDP growth rate: 7% per annum
- GDP per capita (ppp): \$10,400

Composition of GDP by sector:

- Agriculture 10%
- Industry 33%
- Services 57%

Occupation of labour force by sector:

- Agriculture 32%
- Industry 26%
- Services 42%

Source: CIA World Factbook

2015 IFEAT Study Tour

This year's Study Tour to two regions of France was a great success for all participants. Many thanks to all the hosts and organisers for a fantastic 11 days, during which new knowledge was gained and business partnerships formed and fostered. See pages 4 and 5 for the full report.



IFEAT sponsors two educational courses run separately through the UK universities of Reading and Plymouth. The Flavourist Course is run by the University of Reading and the distance learning programme, in which participants study for the IFEAT Diploma (Fragrance or Flavour), is run by the International Centre for Aroma Trades Studies (ICATS) based at the University of Plymouth. Both courses are popular and well recognised within the industry.

Flavourist Course

The 2015 Flavourist Training Course was held at the University of Reading from 5th to 22nd May, and was fully subscribed with twelve delegates from ten countries: Austria, Brazil, Egypt, Ireland, Italy, Malaysia, Panama, Taiwan, USA and UK. The course aims to provide an understanding of the flavour characteristics of a wide range of key aroma chemical compounds and how to incorporate them into food flavourings. The teaching comprises a series of lectures on key topics related to flavour science, and practical work tasting key raw materials and creating flavours. The emphasis of the course is on practical participation in flavour creation, but students are also brought up to date with international regulations relating to the use of flavourings.



Sau Wai Lam

Ms Sau Wai (Lisa) Lam, a former employee of CPL Aromas (Far East) Ltd, based in Hong Kong, is the 2015 Best Student with an overall mark of 63.5%. Ms Lam worked within the R&D department at CPL Aromas for four and a half years. *"Although I had decent technical experience in the aromas industry, I found that I didn't have much general understanding such as the financial, regulatory and business side of the aroma trade and industry until I started the ICATS programme,"* said Lisa. *"Course materials covered most of the subjects important to the aroma trade and industry such as history of scents, regulation, product development etc, which has greatly benefitted my career path as I transitioned from R&D to product development and the business side of the aroma trade. Now I am working at a US perfume company in the perfumery department in charge of choosing the perfect scent for the growing Asian market."*

I would highly recommend other aroma trade professionals from the R&D and technical side to take this course."

This year, the IFEAT award for Best Student was given to **Pei-Lun Lin** from KF Lings Co Ltd in Taiwan.



Pei-Lun Lin

"During the first part of this course we received theoretical lectures on flavour chemistry offered by the distinguished professors at Reading University," Pei-Lun told IFEATWORLD. *"This was followed by many hours of hands-on sessions covering topics including flavouring substance evaluations, GC-O laboratory, GC-MS technique, reaction flavour creation and flavour formulations. Though 21 days may seem short to cover the vast topic of food flavour, this course offers a very rare experience for participants to learn and receive very compact training face-to-face with expert flavourists and university academics."*

This course is no doubt very fruitful for me, but most importantly, this course left me with a role model for becoming a successful flavourist, and moreover, the take-home message included many good practices for flavour creation. I am sure I will keep practising all key skills I have learned in order to shape my career into a successful flavourist in the future."

The 2016 Reading Flavourist Course will be held on 3-20 May. Many of the places on this course have already been taken so early application for the remaining places is essential. The course will be run again in May 2017. For more information, email: flavourist@reading.ac.uk

IFEAT/ICATS Distance Learning Course

The ICATS learning material continues to be revised and developed, with a completely updated edition of *Fragrance Creation* released earlier this year, and a revised edition of *Application of Fragrances to Fragranced Products* under preparation with John Ayres (author) and Roger Duprey (technical advisor). Student numbers have been good this year, with an increase in candidates taking selected modules in CPD mode.

Further information on this course can be obtained from the ICATS website, www.icatsaromaeducation.com, or by email (aroma@plym.ac.uk).

Ultra International (Far East) Pte Ltd.
 Essential Oils, Fragrances & Flavours

www.ultranl.com

First results from IFEAT/RIFM project on safety of specific essential oils

Over the last year, IFEAT has been working with the Research Institute for Fragrance Materials (RIFM) on evaluating the safety of essential oils. As highlighted in the April 2015 issue of IFEATWORLD, this project focuses on testing the oils as a whole in contrast with most previous testing programmes which looked at individual constituents and isolates as sources of toxicity. Over the next several years this testing will determine the potential carcinogenic, mutagenic or reproductive toxicity for a selection of about 200 naturals chosen on the basis of their relative production volume, organoleptic impact, socio-economic importance, REACH compliance and other industry-relevant criteria. IFEAT is initially providing funding for the testing of 15 essential oils within this project. Conclusions drawn from the assessment of each essential oil will take precedence over those previously found in carcinogenic, mutagenic or reproductive toxicity testing of individual constituents.

The assessment for each essential oil involves a battery of tests designed to determine whether that material can cause mutations or cellular toxicity in a living system. If an essential oil produces a positive result on any test, it will be a candidate for further evaluation in greater detail. The first five essential oils to be evaluated have just

completed this battery of testing. **Eucalyptus citriodora oil**, **fir needle oil** (Siberian), **geranium oil** (African), **petitgrain oil Paraguay** and **rose oil** (Bulgarian) made up the first round of oils to undergo the following tests:

- BlueScreen™ HC, conducted by Getronix Laboratories, is an assay composed of mammalian cells that measures the genotoxicity and cytotoxicity of a mixture or compound.

- This is followed by a Bacterial Reverse Mutation Assay (OECD 471), otherwise known as the Ames Test. This test determines the incidence of mutations in a bacterial cell culture that has been exposed to an essential oil or other material.

- Finally, the *in vitro* Micronucleus Assay (OECD 487) evaluates the cytogenecity of the essential oils in *in vitro* human peripheral blood tissue. This test provides information on whether a material interferes with cell reproduction during the process of cell division.

IFEAT is very pleased to report that all five essential oils tested negative for evidence of genotoxicity in each of the three assays.

The IFEAT/RIFM project focuses on testing whole essential oils for their safety rather than individual constituents



With the successful completion of this first round of testing, RIFM will be initiating a second round composed of more essential oils of importance to the industry. If, for specific naturals, sufficient data are available, they are not proposed/supported by IFEAT. As more promising and informative results come in, this information should prove to be very useful for IFEAT members. IFEAT will also look to use the results to guide future regulation and possible additional end point testing of essential oils.

IFEAT ANNUAL GENERAL MEETING Colombo, 29th September, 2015

Members are advised that the IFEAT Annual General Meeting (AGM) will be held at the Cinnamon Grand Hotel, Colombo, on **Tuesday 29th September at 09.00 am**, an earlier time than in previous years. The AGM agenda has been sent to all members. Non-members are welcome to attend as observers.

Structure of IFEAT

Following some questions from members concerning the structure of IFEAT, we explain here the roles of the two key positions within the Federation; the President and the Chairman of the Executive Committee. As well as the Executive Committee there are a further 10 committees and one sub-committee working on specific issues related to the international trade of essential oils and aroma chemicals. These are listed on the IFEAT website.

The President is elected by the membership at the AGM. The President is responsible to the membership and looks after their

interests. As a voting member of the Executive Committee the President attends Executive Committee meetings and acts on behalf of the membership keeping their interests and welfare in mind. The President presides at the AGM and all special meetings of the membership. The current President is **Raúl Amigo**.

The Executive Committee Chairman is selected by the members of the Executive Committee. The Chairman provides leadership to the Executive

Committee whose members, as Directors, are responsible for the administration and management of the business of the Federation. The Chairman acts as the spokesperson on behalf of the Federation, presides at all Executive Committee meetings and oversees the various committees. The current Executive Committee Chairman is **Alain Frix**.

2015 IFEAT TWO IMPORTANT R

By Peter Greenhalgh, IFEA



Peter Greenhalgh with Romina Garay (left) and Beatrice Torrente

IFEAT Study Tours go from strength to strength. They are proving to be a great learning experience – in the company of other industry specialists, who might be competitors but become good friends. This facilitates the growth of the international IFEAT family. While each Study Tour follows a similar format they remain very different, predominantly because of the country and companies visited as well as different participants.

The **Study Tour to France** – the spiritual home of the fragrance and flavour industry - was longer and larger than the previous seven Tours. It took place from July 5th to 15th and some 48 people participated – with 22 different nationalities – a true United Nations of the F&F ingredients sector. The Tour was centred on two locations in southern France, namely the Provence, Alpes and Côte d'Azur (PACA) region in the south-east and Aquitaine in the south-west.

Thanks to imaginative planning and persistence, particularly by **Thierry Duclos** of Quimdis (Chair of the Local Organising Committee and with an intimate knowledge of the sector), participants were able to visit a range of organisations involved in the F&F ingredients supply chain. These included producers, processors, cooperatives, traders, compounders, manufacturers and research organisations – from small farmers to large multinational companies with annual turnovers in excess of €1 billion.

The Tour began with a Welcome Reception on Sunday evening in Avignon, close to the Mediterranean, and finished 11 days later at Biarritz on the Atlantic coast. Over 10 days participants saw the production and processing of essential oils and aroma chemicals produced and imported into these two important production and processing areas of France, including lavender, lavandin, clary sage, pine derivatives as well as many small speciality items. The tour was timed to match the cropping and processing of the lavender, lavandin and clary sage crops – and delegates were not disappointed. For three days we saw the spectacular colours and the harvesting on the Plateaus de Albion and Valensole – and these images will stay in the memories of delegates for many years to come. Delegates visited the

lavender/lavandin and clary sage production and processing operations of **Bontoux, Cassan, Fournel, Burcheri, Aubry** and **SCA3P**, and learnt about new planting and processing techniques and other research activities of **CRIEPPAM** and **CENSO**. In addition, there was a long visit to **L'Occitane's** headquarters at Manosque, where delegates obtained detailed insights into the operations of this global, natural and organic ingredients based cosmetics and well-being product manufacturer and retailer.

Then followed three days in the Grasse area, home of the world's perfume industry. Excellent visits were made to two of **Mane's** state-of-the-art technical, scientific and creative operations, as well as the **Payan Bertrand** and **Robertet** processing plants. These were followed by a guided tour of the **International Museum of Perfumery**. The visits illustrated the region's considerable know-how and innovation in the transformation of aromatic raw materials and how important it remains for our industry.

On Sunday afternoon, while visiting St Honorat Island off Cannes, we learnt that our evening flight from Nice to Bordeaux was cancelled. By some miracle, **Beatrice Torrente** of the Emphase tour agency who accompanied us throughout the Tour,



STUDY TOUR REGIONS OF FRANCE

IFEAT Study Tour Coordinator



managed to arrange a 550 km detour via Paris for the group, involving an additional flight, but remarkably arriving in Bordeaux only an hour behind schedule on one of the busiest travel weekends of the year in France! In the Landes area we visited **Biolandes** operations at Le Sen and then on July 14th – the most important national holiday in France – **DRT** arranged a visit around their large plant at Vielle-Saint-Girons. The day ended with a Gala Farewell Dinner at the Café de Paris in Biarritz, where everyone received a red Basque Beret and watched a spectacular



firework display to celebrate Bastille Day. The visits and quality of information dispensed by the hosts varied. Most companies provided excellent introductions or videos to explain their operations, and it was obvious that each company had put in a lot of effort to provide detailed analysis of their production and processing operations, enabling delegates to become much wiser regarding the specifics, as well as learn about new innovative techniques in all areas of the supply chain. Moreover, several of the companies sponsored superb meals and provided gifts as mementoes of the visits. The group was able to present each company with a copy of the Delegate Pack, containing detailed briefing notes on the companies and delegates, as well as various essential oils and articles on the French F&F industry.

The innovation on the China Study Tour of “Bus Lectures” continued and knowledgeable and experienced specialists from around the world were able to both explain in greater detail what we had seen as well as put it into context. The wide range of expertise and knowledge on hand made it remarkably useful and informative.

The Tour provided a lasting impression of the French F&F ingredients sector as well as the kindness and hospitality of our hosts and the French “art de vivre”. In addition, the coach journeys revealed some beautiful scenery, particularly Les



Gorges du Verdon, and there were many cultural insights, including the Palais des Papes, Château Smith Haut Lafitte and St Paul de Vence. Yet again, the study tour achieved its objectives of seeing at first hand the production and processing of various F&F ingredients and obtaining a much clearer understanding of the various processes, capabilities and set-up of different facilities and an appreciation of the broad spectrum of



F&F products that France can offer. Delegates were able to meet up with some of the key figures within our industry. Finally, participants were able to get to know the other delegates and their expertise, and share some unique cultural experiences. Thus, it proved to be another superb tour, thanks to the support, excellent hospitality and commitment of the French companies that were visited – nearly all of which are IFEAT members – as well as the efforts of Thierry Duclos and Beatrice Torrente.



Jean Mane (left) being presented with the Delegate Pack and certificate by Thierry Duclos

USA STUDY TOUR 2016
TEXAS *Pacific Northwest*
& *MIDWEST*

IFEAT is pleased to announce that the 2016 Study Tour will take place in the USA from 13th to 21st August visiting the states of Texas, Washington, Michigan and Indiana. Participants will visit essential oil and oleoresin producers, processors, distributors and users. More information will be available at the Sri Lanka Conference.

Sponsors of the 2015 Study Tour



The Spice Council of Sri Lanka welcomes IFEAT members to the Spice Island

By Nanda B Kohona, Chairman, Spice Council of Sri Lanka



Nanda B Kohona

The Spice Council of Sri Lanka, as the apex body of the spice industry consisting of members from the private sector and the government sector, is delighted that the world's giants in the fields of essential oil and aroma manufacture will gather in Colombo for their annual conference in September.

The Spice Council has over 95% of Sri Lankan spice and essential oil manufacturers in its membership list. This will be a fabulous opportunity to show our spice plantations, production facilities, unique Sri Lankan spice products as well as the Sri Lankan heritage in the essential oil and aromatic plant industry.

The Spice Council works towards a common goal of increasing the competitiveness of the industry with the participation of all stakeholders through productive and constructive dialogue between the private and public sectors. Our vision is for "Sri Lanka to be within the top five branded and value added spice marketers in the world". Certainly, the country has been well known for its spices and essential oils for centuries. History states that it was the "Ceylon spices", particularly cinnamon, that brought the Portuguese and the Dutch to this island five centuries ago.

The king of spices is cinnamon (*Cinnamomum zeylanicum* (Blume)), known for its bark and leaf oils, which are major essential oils used in the perfumery and aroma industry. HS Redgrove wrote in 1933; "It seems quite probable that the Chinese, who traded with Ceylon, were concerned about the discovery of the valuable qualities of the bark of this Sinhalese tree, similar but superior to the cassia of their own country. At any rate when the Sinhalese product was imported into Europe, its superior character was soon recognised and the product fetched a very high price."

Many Sri Lankan essential oil producers are members of the Spice Council and we are proud that several key members have been recognised for their excellence. In the global oleoresin and essential oil industry, Sri Lankan pepper extract (*Piper nigrum*) is rated in the highest category since Sri Lankan pepper varieties possess a high volatile oil content and have the highest piperine content among all pepper producing countries. We are looking to create a new standard for Sri Lankan pepper taking into account its high piperene levels.

"The Spice Council is striving hard to encourage the growing of more spices..."

Furthermore, nutmeg oil, mace oil, clove oil and cardamom oil designated as Sri Lankan grade, as well as ginger oil and oleoresin and



Oil distillation and oleoresin plant in Sri Lanka

Ceylon citronella oil, fetch high prices in the world markets, proving the high quality of Sri Lankan essential oils. However, due to the limitation in plantations of the above crops our production quantities are limited. The Spice Council is striving hard to encourage the growing of more spices to meet current world demand.

It is a pleasure for the whole membership of the Spice Council to take this opportunity to ensure that IFEAT members will have an opportunity to see the historic Spice island of Sri Lanka, its plantations and distillation and extraction industries, and to experience the unique Sri Lankan flavour.

We are proud that currently Sri Lanka is the largest supplier of cinnamon leaf oil to the world's perfume industry and is also a major supplier of cinnamon bark oil. We strongly believe that the specific tropical climatic conditions we Sri Lankans enjoy, with both the east and the west monsoons, has blessed our plantations to produce a characteristic flavour compared to other producers. This is enhanced by the superior techniques of our traditional processing practices e.g. curing before drying to develop the true cinnamon aroma.

It must be specially mentioned, and is much appreciated, that IFEAT along with the USAID- REVIVE programme with the Spice Council, assisted the livelihoods of people in the spice industry affected by the tsunami in the southern part of Sri Lanka. IFEAT contributed with a generous donation of USD10,000 in early 2005.

For more information on the Spice Council please go to www.srilankaspices.org



A cinnamon plantation

A. FAKHRY & CO.

THE SOURCE.

100% Pure & Natural Egyptian Jasmine *grandiflorum* (CAS/EINECS# 84776-64-7) Concrete, Absolute, Organic Extract



Environmental Consciousness

Socially Responsible

Reliable Service

Quality Control

Innovation

YOUR EGYPTIAN SOURCE FOR 60 YEARS

Address: 1081, Corniche EL-Nil, 11451 CAIRO | EGYPT
Tel. +202 2795-0685 / +202 2795-0934 | Fax. +202 2794-4198
sales@afakhry.com | www.afakhry.com





A. FAKHRY & Co.

CRAFTERS OF AROMATIC RAW MATERIALS FROM EGYPT, SINCE 1955



CELEBRATING 60 YEARS

Bringing together our community and the F&F world



NEW IFEAT MEMBERS

Below is a list of new IFEAT members who had joined by 7th July 2015:

Grupo Altex Europe, Spain



Paseo de Gracia, 21, 5º, 2ª
08007 Barcelona
SPAIN

Tel: +34 9 34 81 77 37

Fax: +34 9 34 81 77 39

E-mail: jcanillo@
grupoaltex.com

Website: www.grupoaltex.com

Contact: Mr. Joaquin Canillo

Oxeyns



7th Floor, Me Linh
Point Tower
2 Ngo Duc Ke
70000 Ho Chi Minh City
VIETNAM

Tel: +84 9345 90405

Fax: +84 8382 37840

E-mail: aduong@oxeyns.com

Website: www.oxeyns.com

Contact: Mr. Andy Duong

CV Ratu Aroma



Perum Griya Permata Cisoka
Blok A2, No.13, Cisoka
Banten

Tangerang 15730

INDONESIA

Tel: +62 21 595 3931

Fax: +62 21 595 3931

E-mail: info@ratuaroma.com

Website: www.ratuaroma.com

Contact: Mr. M. Rafiudin

Banwari Aromas Pvt Ltd



G6 Allied House
2 Old Rohtak Road
Inderlok

Delhi 110035

INDIA

Tel: +91 11 23656871

Fax: +91 11 45870095

E-mail: pulkit@
banwariaromas.in

Website: www.banwariaromas.in

Contact: Mr. Pulkit Goel

YST Fragrances Pvt Ltd



Office No. 110/111

1st Floor, Shoppers Point
S.V. Road, Andheri (West)
400058 Mumbai
INDIA

Tel: +91 22 66993513/14

Fax: +91 22 67102896

E-mail: talha@
ystfragrances.com

Website: www.ystfragrances.com

Contact: Mr. Talha Attarwala

Citrofrut SA de CV



Av. Constitucion 405 Pte
64000 Monterrey Nueva Leon
MEXICO

Tel: +52 81 8389 4234

E-mail: marlene.tamez@
citrofrut.com.mx

Website: www.citrofrut.com.mx

Contact: Ms. Marlene Tamez

AZ Fine Chemicals SA de CV



Providencia 1409
03100 Mexico City
MEXICO

Tel: +52 55 55367483

E-mail: j.arias@
azfinechem.com.mx

Website: www.azfinechem.com.mx

Contact: Mr. José Arias

Tropicoils SL



33 Carrer Andorra
08330 St. Boi de Llobregat
SPAIN

E-mail: matthias.kindermann@
tropicoils.com

Website: under construction

Contact: Mr. Matthias Kindermann

Zhejiang Yuchangshen Aromatics Co Ltd



No. 1 Longchang Road
Lanxi Economic Development Zone
Zhejiang
Lanxi 321100
CHINA

Tel: +86 579 88236899

Fax: +86 579 88236898

E-mail: summer721@
ycsaroma.com

Website: www.ycsaroma.com

Contact: Ms. Wu Ling (Summer)

Phytosynthese



57, Avenue Jean Jaurès
63200 Mozac
FRANCE

Tel: +33 4 73 33 45 17

Fax: +33 4 73 33 45 10

E-mail: johann.hurtaud@
phytosynthese.com

Website: www.phytosynthese.com

Contact: Mr. Johann Hurtaud

Elshabrawi Group



3 El Nady
72427 Tanta
EGYPT

Tel: +20 403334100

Fax: +20 403334100

E-mail: sales@
elshabrawi-group.com

Website: www.elshabrawi-

group.com

Contact: Mr. Ashraf Elshabrawi

Puressentiel



122, Boulevard Exelmans
75016 Paris
FRANCE

Tel: +33 1 44 40 55 00

Fax: +33 1 47 54 93 88

E-mail: c.cazeneuve@
puressentiel.com

Website: www.puressentiel.com

Contact: Ms. Corinne Cazeneuve

Advertise in IFEATWORLD

With a circulation of over 4,000 contacts in the F&F industry, IFEATWORLD offers members an ideal advertising opportunity. Please contact sarah.nightingale@ifeat.org for more details.



NATURALLY SINCE 1908

ESSENTIAL OILS
FRAGRANCES
FLAVORS

WWW.LEBERMUTH.COM

1-800-648-1123

4004 Technology Dr.
South Bend, IN 46628



MY FAVOURITE... True cinnamon

by Dr Devapriya Nugawela, Chairman, Link Natural Products (Pvt) Ltd



Cinnamon has a history that dates back to the second century BCE, and possibly even earlier. It is referenced as one of the most sought after spices during the time of the Roman Empire, and is also mentioned as one of the most important medicinal spices in the works of Pliny the Elder, and the Greek writers Dioscorides and Theophrastus. Cinnamon was also used in ancient Egypt as a spice that added piquancy to meat foods and helped preserve them. It was also used in rituals and embalming, on account of its properties as a deodoriser. The Holy Bible mentions the use of cinnamon by Moses to make his anointing oils. It seems most probable that the cinnamon of that period in Europe came from the variety now identified scientifically as "true cinnamon" originating in the island then known as Ceylon.

Cinnamon was brought to Europe via the overland trade route of the Venetians in the Middle Ages. At this time only the very wealthy could afford the commodity. The high value prompted the historical voyages of the maritime nations Portugal and Holland, and even the voyages of Columbus,



Dutch Governor Falck initiated the plantation cultivation of cinnamon in Sri Lanka in the 18th century

who convinced the Queen of Spain that he was seeking a new way to the Spice Islands and to a source of the precious cinnamon.

When the Portuguese colonists took over the bartering of cinnamon from

the Sinhala King in exchange for military favours in the 16th century, they had control of the commodity that meant enormous wealth in Europe, and with it political and economic power. The Portuguese benefitted from the control of the flow of cinnamon into Europe and enriched themselves immensely. Eventually the Dutch colonials took over the trade from the Portuguese, causing a shift in power in Europe. It was the Dutch who put cinnamon on a plantation basis in the island.

Following the maritime explorations of the Portuguese and the Dutch and the opening of the sea routes to Asia the price of cinnamon dropped dramatically. The Dutch enjoyed the monopoly of cinnamon for 150 years, but after the 1784 Anglo Dutch war, the British took charge of the maritime provinces of Ceylon. By this time the value of cinnamon was no higher than it had been in the era pre-dating the early days of overland trade.

Today in commerce there are several main types of cinnamon. "True cinnamon", which originally was discovered in Ceylon, is botanically identified as *Cinnamomum zeylanicum* or *Cinnamomum verum*. "Cassia cinnamon" varieties, scientifically identified as *Cinnamomum cassia*, are more abundant and grow in the South-East Asian region, while the "Java cinnamon" variety (also sometimes referred to as cassia) grows in Indonesia and is identified as *Cinnamomum burmanni*.

The chemical composition of the several varieties of cinnamon bark has been the subject of extensive investigation. As well as the major constituents, which are cinnamaldehyde, cinnamyl alcohol, and eugenol, cinnamon contains a large array of components that belong to the chemical

class termed "terpenoids". These vary in each species and the distinct and preferred aroma of the Ceylon variety is due to its characteristic array of these minor constituents.

There are striking differences with regard to the fragrance and appeal of the cinnamon varieties. The "cassia" variety is coarse and the "true" variety is finer in texture. The main chemical difference is the presence of coumarin in the cassia variety in comparatively substantial quantities. Coumarin is harmful to the liver and is thus not considered healthy for oral consumption in too high a concentration. The array of volatile agents in true cinnamon differs from those in cassia and the former has the decidedly more appealing fragrance. The polyphenol content also differs and the condensed tannins in the true variety are now deemed to be vital in the medicinal properties attributed to it.

There are many evidence-based medicinal properties attributed to cinnamon, including effective blood sugar control, the inhibition of development of neurodegenerative diseases, the improvement of colon health and protection against heart disease as well as many others. These properties are backed up by scientific evidence derived experimentally and published in scientific journals.

The appeal of true cinnamon in commerce is mainly for the fragrance and flavour industry, but there is also specific demand for it in the food industry. In the US, cassia cinnamon has been used for flavouring cakes and sweets due to its greater availability there. In Europe however, the Ceylon variety is more often used to flavour traditional foods such as the continental "apfel strudel".

2016 IFEAT CONFERENCE

Dubai | 25 - 29 September 2016

Next year's IFEAT Conference will be held in Madinat Jumeirah, Dubai, on 25th to 29th September 2016. The theme of this Conference will be:

"The Middle East – Challenges at the historical crossroad of the F&F trade"

Further information will be available on the IFEAT website shortly. We look forward to seeing you there!



The International Federation of Essential Oils and Aroma Trades Limited
Dorfstr. 40, 86470 Thannhausen, Germany

Tel.: +49 8281 799 40-44 Fax: +49 8281 799 40-50 E-mail: secretariat@ifeat.org

Registered in England & Wales with liability limited by guarantee under Company no. 01369368