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IFEA WORL

INTERNATIONAL FEDERATION OF ESSENTIAL OILS & AROMA TRADES

APRIL 2020

MY FAVOURITE:
CINNAMON

PATCHOULI ROUNDTABLE

NEW FACES FOR IFEAT

BERLIN 2020

SUNDAY 11 OCTOBER - THURSDAY 15 OCTOBER 2020
INTERCONTINENTAL BERLIN HOTEL
执行委员会，以及我们的服务提供商，仍然不知道答案。我们一直在密切关注形势，并致力于为会员做好准备，并公开告知您我们将如何处理未来的活动，包括2020年柏林会议及其注册截止日期。

持续更新的COVID-19与报告的不确定经济时期。对某些会员而言，形势引发了业务增长，而对其他会员而言，影响却很严峻。仅举一例，物流中断可能导致某些输入品的短缺或极高的运输费用。这些情况严重影响了小型供应商和那些处于大流行前线的会员。

困难时期可能导致业务伦理和专业行为的松懈。尽管我们都希望危机永远不会降临到您的公司，但建立一种良好的关系——通过荣誉和透明度来重新沟通您的价值观和利益，对您的供应商、员工、客户和其他关键受众来说是个好主意。

COVID-19爆发是社会的快节奏故事，很难预测对我们的社区的影响。在全球范围内，我们有充分的理由相信情况会变得更糟，然后才好转。我担心这会影响到IFEAT会员。

然而，我也相信，在像这样的艰难时刻，合作的力量是最需要的，前所未有的导师、信心、相关性和成熟度。我敦促会员之间的合作。通过帮助大家克服这个障碍，我们正在帮助我们的行业繁荣发展。

我邀请您加入IFEAT的社交媒体平台并与其他会员和IFEAT秘书处交流。让我们知道您的善举。他们不会被忽视的！

Facebook: @IFEAT.ORG
Twitter: @IFEAT_org
Instagram: @ifeat77

在43年的历史中，IFEAT一直与会员站在一起，面对自然灾害、监管动荡和政治挑战。我们之所以能够做到这一点，是因为我们把会员放在一切活动的中心。怀着这种承诺，我相信我们也将克服这一具有挑战性的时间。

安全且坚强。

您诚挚地，

Hussein A. Fakhry
IFEAT执行委员会主席
Annually our global membership gathers somewhere in the world; the destination is part of the experience. It gives our delegates an opportunity to visit different parts of the world, experience different cultures, converse with essential oil producers and dealers, share information as well as the chance to rekindle and form new relationships in person.

It gives me immense pleasure to share with you that Berlin, Germany is the chosen destination for the 2020 IFEAT Conference. On behalf of IFEAT and the Berlin Conference Committee, I would like to extend a heartfelt invitation to all of you to join us for the upcoming edition of this globally collaborative platform.

Germany’s capital is a vibrant creative metropolis. Berlin has been the stage for a lot of world history, not just the fall of the Berlin Wall. You can discover countless places of history around the capital, cultural landmarks, monuments and museums, tasty beer (for those who partake) and a plethora of green spaces. Berlin is a city celebrated for its freedom, creativity and “cool” attitude, offering experiences for everyone!

Our IFEAT in-house staff team, contractors and the Berlin Conference Committee have been hard at work for the past two years organising what promises to be a memorable event for all. An IFEAT Conference that should not be missed!

In the next issue of IFEATWORLD, there will be details of the full Conference speaker programme. Last year in Bali we changed the programme with speaker sessions on each of the four mornings instead of over two full days. The new format proved very successful and the sessions were well attended so we will have similar timings again this year in Berlin. We encourage you to attend these very insightful and informative presentations. The speakers go to great length to give interesting and educational speeches.

The Berlin conference will be held from 11th to 15th October 2020 and registration will open in April.

We look forward to welcoming you to Berlin!

Jens-Achim Protzen
IFEAT Berlin Conference Chairman
NEW FACES FOR IFEAT

Janine Moore joined the IFEAT staff team as Events Manager in early January. She is working alongside current Events Manager Sarah Greenwood and will do so until after the Berlin Conference in October when Janine will fully take over the role from Sarah Greenwood who will leave IFEAT to pursue her own exciting new retail business venture!

Janine has 18 years of experience in global event management and has organised events on most continents. She has trained and led global teams to deliver events around the world.

After having children, Janine embarked on a career of contract and freelance event work for a variety of companies in different sectors as an event manager/head of events. She has creative agency, B2B, charity sector and membership association experience. Her most recent role was Head of Production for Affiliate World Conferences (2016 - 2019), organising and delivering their two annual events (conference, exhibition and multiple networking events) in Barcelona and Bangkok, with 3,500+ attendees and 150 exhibiting companies.

Janine is mother to two boys, both at primary school, and enjoys spending time with her family. She loves the outdoors, woodland walks, yoga, cooking, great food and cultural experiences.

Janine told IFEATWORLD, “I’m delighted to have joined the IFEAT team and each has given me such a warm welcome. I’m looking forward to working with the Committees, learning further about IFEAT and also working closely with Sarah to make the IFEAT annual Conference and Exhibition, and the study tours a success!”

Sibel Erkilic Horsman, joined IFEAT as a contractor at the beginning of February as Scientific Administrator working alongside IFEAT’s Chief Scientific Officer, Jonathan Bonello. Sibel will manage administrative tasks relating to the IFEAT Scientific Committee, identifying the best approach to issues and opportunities affecting the production, regulation and use of essential oils and their related materials. She will maintain and develop the IFEAT biodiversity database and work with Jonathan to enhance the strong relationships with organisations and industry forums such as IOFI, RIFM, EFEO and IFRA.

Sibel has over 20 years of experience in procurement, focusing on engineering and strategic investment and for the past 15 years has lived and worked in a number of countries including the US, Spain, the Netherlands and Switzerland. Prior to joining IFEAT, she was the Global Category Manager, Engineering and Utilities Lead at Givaudan and has also worked for SC Johnson, Philip Morris, Cognis and the Ford Motor company. She has experience in category management, energy sourcing and sustainability, holds a BSc in Chemical Engineering and a Masters in Industrial Engineering from Bogazici University in Istanbul, Turkey. Sibel has also worked as a PhD research assistant for Boeing in the US. She speaks English, Spanish, French and her mother tongue (Turkish) and lives in Zurich with her husband and young daughter.

Sibel said; “Having spent eight years in a procurement role in the fragrance industry, I have just returned from a two year career break to raise my daughter. I am now very much looking forward to starting work with the IFEAT Scientific Committee, meeting the other Executive Committee members and re-engaging with colleagues throughout the industry to promote the work and contribution of IFEAT to its members and the industry at large.”

Janine and Sibel join staff members Tina Carne (Conference Programme, Web and Media Manager), Ronit Meier (Finance Coordinator), Sarah Greenwood (Events Manager) and contractors Jonathan Bonello (Chief Scientific Officer), Peter Greenhalgh (Study Tour Coordinator) and Louise Kapor (Executive Committee Secretary/Membership Manager).
PrOdasynth, proud to belong to the city of scents.
As a youngster, I remember loving to play with the chemistry set mom and dad gave us at holiday time. I remember the enjoyment of performing the experiments and mixing different chemicals, according to the formulas, and then testing the results. There were times when we felt like “mad scientists” (the movie Frankenstein was popular at that time) and, of course, we tried to create formulations that were not part of the “owner’s manual”. Needless to say, we experienced many failures, but we never hurt ourselves in the process. In fact, the infatuation with chemistry became a lifelong pursuit for me because of this introduction.

Compounding ingredients and making new mixtures, was the beginning of my deep love for fragrances, flavours and the essential oil industry.

One of my first memories was being exposed to cinnamon oils.

In grammar school, I discovered cinnamon oil... and cinnamon flavoured toothpicks!

Growing up in the 1970s, chewing gum in school was forbidden and you risked detention if you were caught chewing gum in class. But, no one said anything about using toothpicks. In fact, it was cool to walk around sporting a toothpick; none of the teachers complained.

My dad would bring home oils of cinnamon, cassia leaf, synthetic cinnamic aldehyde and cinnamon bark oil. Dad let us smell these oils and I began to experiment mixing various percentages of these oils and developing different cinnamon flavours.

It is at this point that my older brother Larry and I became more enterprising. We would experiment and create different cinnamon formulations. We discovered that cinnamon bark harmonised with cinnamon leaf would reduce sensitivity on the tongue. We discovered that too much cinnamon leaf oil would impart too much clove flavour. We learned that adding a bit of cinnamic aldehyde provided both flavour and heat but reduced the flavour balance and taste quality. We finally figured out the proper formula that provided both the flavour and the correct heat on the tongue - and also didn’t burn our hands and fingers!

We initially made these for ourselves. What we didn’t expect was that this became a business opportunity! We started to give our creation away to our friends. We would bring the flavoured toothpicks to school wrapped in foil and soon our friends began asking for more of these flavoured picks.

We started a little business selling our flavoured picks. It was at this point that I became fully vested in the opportunities in the essential oil business that my family was actively involved in. You see, there was profit in our creation!

I developed a love for cinnamon oils.

Later, I learned formally what I stumbled upon as a youth: that it was cinnamon bark with cassia and the synergy of their powerful natural components that provided the effects and flavour impact which is so treasured in so many different flavour and fragrance formulations. Working with essential oils and fragrances has been one of the most enjoyable parts of my life. When creating a fragrance or flavour, I become a youngster again. The fun and enjoyment of seeing the results of what you imagine in your mind become something tangible and experiential, is indescribable!

There is a significant difference between cassia leaf essential oil (Cinnamomum cassia – CAS No.: 8007-80-5) produced in China and the cinnamon bark essential oil (Cinnamomum zeylanicum L. CAS #: 8015-91-6) produced in Sri Lanka. Cassia oil and cinnamon bark oils both contain cinnamic aldehyde. Cassia typically contains about 5% more cinnamic aldehyde than cinnamon bark. Because of this difference, the leaf oil smells more pungent and not as well rounded as the bark. This may also be due to the o-Methoxy cinnamaldehyde in the leaf oil. Both oils also contain benzaldehyde, an almond note, and cinnamon bark oil contains a significantly larger percentage of this regulated molecule. Cassia oil is used in far greater quantities in the world because of its price which can be directly related to its yield.

Comparatively, China exported 550 metric tons of cassia in 2017, 500 metric tons in 2018, and 450 metric tons in 2019. Recently it has been reported that production and export quantities are declining as Vietnam’s production is increasing and is in more demand, since the content of cinnamic aldehyde is higher in the Vietnamese quality.

As a side note, the largest volume of any essential oil exported from Sri Lanka is cinnamon leaf (Cinnamomum zeylanicum - CAS No.: 8015-91-6): 309,001 kilos in 2017, 280,876 kilos in 2018 and 261,960 kilos in 2019.

CONCLUSION:

Some of the world’s best-known flavours and brands use cassia and/or cinnamon bark oil; such as the world’s best-known ketchup and, of course, soda beverages! They would simply not taste the way they do without these natural ingredients.

Consumption of both cassia and cinnamon bark oil will continue to grow. The world’s population continues to increase and there is much demand for cinnamon oils and cinnamon flavours in populations that formerly could not afford to purchase value-added products. This, coupled with the discovery of new benefits of cinnamon oils, will undoubtedly see cassia and cinnamon bark consumption increase.

Perhaps cinnamon flavoured toothpicks will go viral and become the new rage and the demand driver... who knows for sure?
IFEAT began the roundtable concept at the Athens Conference in 2017. The roundtable aims to facilitate debate and the exchange of information among IFEAT members around important topics common to the F&F industry. The fourth roundtable on patchouli was held at the 2019 Bali Conference involving 35 participants from 23 organisations and 11 countries. The debate was chaired by two IFEAT Executive Committee members, Dominique Roques and Ravi Sanganeria, who presented both the roundtable concept and aspects of patchouli. It was reiterated that IFEAT as an organisation has no point of view regarding the topics discussed and that it was a “pre-competitive” meeting in which no price or commercial discussions should take place. Participants were there to express their knowledge, experience and opinions on patchouli in an open and free discussion.

Indonesia annually produces between 1,000 – 1,500 MT of patchouli oil, accounting for approximately 90% of global output. Patchouli played an important role in the foundation of IFEAT, when in 1976 sizeable quantities of patchouli and other oils were shipped from Indonesia as water, leading many essential oil traders worldwide to lose substantial amounts of money. A key feature of patchouli, discussed by Petrus Arifin in his IFEAT Medal Lecture the previous day, was patchouli’s price volatility leading to many bumpy rides for most stakeholders, including producers, distillers, traders and end users. For example, one roundtable chair had been working in the industry since 2004/05, when prices were at an all-time low, while some three years later prices were around 10 times higher because of speculation and other factors. Over the past decade, volatility has diminished, and there appears to be a new global landscape. Participants at the roundtable included representatives of leading Indonesian companies who had been involved in patchouli for several decades and who were able to bring their considerable knowledge to the debate. To facilitate discussions, a series of questions was posed, and a summary of the discussion follows.

What have been the major changes in the last 10 years or so?

Major changes cited included:

- The shift in the location of production. In the early 2000s Sumatra was the dominant producing area. Indeed, the Indonesian name for patchouli is derived from the Dutch name for the location of where patchouli was originally grown. Sumatra’s role has greatly diminished with a shift to Java and then Sulawesi. The latter now accounts for approximately two-thirds of global output involving some 30,000 – 40,000 producers.

- A shift in industrial behaviour, with big buyers being much more responsible in their purchasing patterns. Long gone are the days when they go out to ten suppliers saying they wanted an immediate shipment of 50 MT, which leads to a substantial overestimation of actual demand.
Availability of bio-tech products; although not a big aspect as yet, since it is a different material but at least it gives users a choice and stops prices escalating to a level that makes patchouli unsustainable.

Changes in the quality of oil production.

Patchouli oil quality

The best quality oil is from Sumatra and the shift to Java led to a fall in quality, which fell further with the shift to Sulawesi. In Sumatra, the alcohol content is 34% – 36%, while initially in Sulawesi it was about 24% – 26%. Over the past six to seven years it has risen to 28% – 29% and even reached 30% in some places. While the shift has led to reduced quality, efforts are being made to improve it, but it still creates challenges compared with the original Sumatra quality. Soil differences between Sumatra, Java and Sulawesi make it impossible to deliver Sumatra quality from Sulawesi but growing on different types of terrain in Sulawesi make it possible to obtain better qualities. Patchouli grows better at elevations of between 200 – 300 metres above sea level. Initially patchouli was grown in Sulawesi at sea level but growing at higher elevations improved patchouli quality with a higher PA and lower acidic value, but still not comparable with Sumatra. It was suggested that soil testing should be undertaken, and efforts made to improve it.

Also, distillation methods differ. Sumatra still has the old-style iron drum type of distillation, facilitating cheapness and mobility, using about 50 – 60 kg of leaves in one distillation. There is no drum distillation in Sulawesi, where stills are more advanced and of much higher quality, with a capacity of about 500 kg. The patchouli oil colour in Sumatra is different, partly because of the rusting of the drums. However, it is not only the distillation part, but also the soil that plays an important role in the olfactory differences between origins. Also, Sumatra quality is better because distillers put more stems in the still, while in Sulawesi there are more leaves. This is also why the patchouli alcohol is higher and has a more woody note. Better farming practices and distillation techniques can improve quality.

Demand for patchouli for certain uses is being satisfied by fractionating the oil and adding patchouli residues. There is still the demand for 34% patchouli for some uses e.g. pine fragrances, and the question remains how a sustainable supply can be satisfied by Sulawesi production since the quantity available from Sumatra is declining.

What is the future of patchouli in Indonesia and the rest of the world – could it ever go back to Malaysia?

The general consensus was that patchouli will always be in Indonesia because of its relatively low wages and availability of land. In contrast Malaysian wages are very high. It could return to Sumatra, which has plenty of land, as long as prices improved. If not, farmers will
produce alternative crops. A major issue with patchouli is that current unsustainable production techniques lead to nutrients being taken from the soil and production has to stop after three to four years. Another issue is that farmers are planting alternative crops, e.g. rubber, palm and coffee, in Sumatra and once these are established and begin to generate income then patchouli production will stop. The issue of patchouli returning to Sumatra had been discussed within the DAI (the Indonesian Essential Oil Council) and it was felt that the possibility would be slim.

From a historical perspective the patchouli story is very interesting. In the late 19th century Chinese immigrants brought patchouli seedlings into the Straits Settlements and started to grow it, with Singapore traders shipping the leaves to London. Distillation of the oil started in the 1920s in Singapore and from the beginning the industry was driven by people of Chinese origin and the supply chain was there. Perhaps in other countries that have tried to produce patchouli, e.g. Rwanda and Brazil, the supply chain has not been there, and this may have influenced development. It is simply not enough for farmers to grow the crop, but a supply chain needs to exist. Perhaps this is one factor why patchouli has stayed in Indonesia – and a parallel was drawn with vanilla in Madagascar. However, in Madagascar the farmers have remained poor – but this is not the case in Indonesia.

There was a discussion of how long it takes for land to recover from producing patchouli and why did it move to Java since in Sumatra as a whole the land was not exhausted? A key factor was the patchouli price relative to other crop prices.

A range of views was expressed on the nature of patchouli as a crop:

- It is a very different crop compared with some others, e.g. farmers prefer citronella which is easier to grow and can be harvested several times a year.
- Patchouli depends on different geographical conditions. It can be grown in Sumatra, Java, Sulawesi, even at home in a small pot.
- Lots of small crops can be grown by farmers but they will prefer the crop that gives them better returns at the margin.
- It was argued that, for a variety of reasons, large buyers can influence the location, but the most important thing is that they should keep buying to give farmers the assurance that the market is still there.

In 2008 prices rose to the second highest ever because of the haze from the forest fires as well as loss through fire of the inventories of the two biggest companies in Medan and Singapore. Why is the situation now much better than in 2008 and patchouli sometimes considered as the barometer of our industry? What has happened? Is this stabilisation being achieved because of better farming and soil use, so slower to migrate to a new location?

If things appear relatively stable, then there is the tendency to think that things are going rather well. So, given the more stable situation does this mean that the patchouli growers are making a decent living and comfortable with the situation which will encourage them to continue growing this plant?

Is Sulawesi the final home of patchouli or is Papua the new promised land? It was felt that Sulawesi will play a major role for many years – lots of land is still available and people can move around. Efforts are being made to educate farmers and make production more sustainable. But some felt that Sulawesi will not be the final home but there will be many homes. It was argued that we shouldn’t underestimate the impact of socio-economic change in Indonesia, which is as much a challenge as the state of the soil or the growing techniques used. This will probably be the one that determines the future home – the issue of competing crops and jobs that are available.

Patchouli is likely to move to other areas since patchouli is still a good cash crop especially for new communities. The shift to Papua cannot be stopped and there is already some small production there. Currently, the challenge is to get the oil out in an economic way. There will be many other areas that will grow patchouli. Geographic and price factors are the major influences on patchouli cultivation. If prices can remain around $50/kg, then Sulawesi will be the final homeland.

Why isn’t there patchouli in Africa or South America? Various companies have tried in Hawaii and Africa. What are the constraints: the need for volcanic soil, is it the plant, the labour-intensive nature...
of production? In Africa’s case one could superimpose on the soil map appropriate to growing patchouli a political map and a conflict map. The example was given of patchouli in Rwanda which has good volcanic soils producing beautiful patchouli and was supported by the authorities – but it never went anywhere. Many aromatic crops are grown in 10 to 15 countries, so why not the same with patchouli? India and China produce some but not much. The question was raised as to why should we want to be encouraging patchouli cultivation elsewhere? Should we not spend time on helping Indonesia improve its production? There is a moral obligation to protect and help Indonesian farmers produce sustainably rather than explore possible production elsewhere.

Farming methods

One former patchouli farmer described the simple techniques used today to produce patchouli. This involved simple “slash and burn” techniques, involving marking out and clearing a piece of land, planting patchouli, and returning in about six months bringing drums, setting up a distillation unit, harvesting and distilling the oil. This is only for one year (or a maximum of two) and then moving on. A weekly visit is made to the market to exchange the oil for basic food supplies.

In addition, there are areas of Java and Sumatra where patchouli has been for more than ten years but not continuously cultivating patchouli in the same fields. The reason is that some communities are undertaking better farming practices, e.g. crop rotation, bringing back the nutrients. This is not because of specific scientific inputs but rather because of the farmers’ own experience, beliefs and practices. It is possible to stabilise production in an area but there are other factors that make this experience few and far between.

Crop rotation was briefly discussed, and the question was asked why bean crops were not used to return nitrogen to the soil. Although seen as a good suggestion, it was pointed out that farmers want to grow crops that are useful for their everyday life and as such farmers have not really been keen on growing crops that produce nitrogen although trials have shown it worked well. The challenge was to persuade farmers to grow them.

Sustainability Issues

Despite Indonesia’s rich volcanic soils, patchouli is a very demanding crop rapidly depleting nutrients from the soil. The crop is usually only grown for two to three years on one plot of land since intensive unsustainable agriculture practices are used, and patchouli depletes a lot of nutrients from the soil, especially nitrogen. After the third cutting it can be easily attacked by disease that farmers are unable to tackle. They try using locally available pesticides but deplete the soil in the short term. Farmers are unwilling to give anything back to the soil and on balance there have been no significant changes in farming methods.

However, a sustainability project undertaken between Van Aroma and Symrise has shown that depleted patchouli soil can be revived within one year to 18 months if certain practices are undertaken. The question is whether farmers are willing to invest to achieve this. Van Aroma described the route taken over the past three years. For them it has been a learning process. Three acres of totally depleted patchouli land was adopted to establish if the soil could be resuscitated. Farmers were very sceptical but within six months, by adopting certain practices, it was turned back to productive land and this is the third year that planting has taken place. Thus, change can be achieved if the right practices are adopted. Others may also be doing similar things and it is important to exchange information and learn from each other.
One major learning is that fungicides used on the top of the plant can provide easy cures. However, the problems are greater from diseases coming from the soil, particularly nematodes. The approach adopted has been an intensive approach rather than an organic approach, although an organic compost has been used. Nevertheless, nematodes are the big challenge and so far, the organic approach has not solved this problem. In contrast, Egyptian jasmine farmers have lived with the problem of nematodes for many years, but it has not been an issue. When jasmine farmers moved to intensive production methods, using less compost or manure, this awakened the nematodes and they attacked the rootlets. So, farmers returned to the methods used by their grandparents, which included using manure to feed the nematodes, which in turn led them to sleep again. The analogy was made about treating nematodes as a sleeping dog and as long as the dog has a bone he will continue to sleep!

Thus, a model for sustainable patchouli exists and it is purely a problem of scaling up. Training/education is the key. There is a need to educate the farmers, some 80%–90% of whom do not know that the diseases can be fought, that planting can be revived, and they are not aware of how to apply the material available in the market.

However, it was commented that there is limited common understanding of the key social, economic and environmental challenges facing the patchouli crop and that these have not been articulated and understood by all the key players. If a common view of the key challenges does not exist, then we may be tackling different things. Crop migration and sustainability have been discussed as key issues but are there others? Once a common understanding is achieved of the key challenges then key options can be explored to address these challenges.

What percentage of patchouli growers are growing on a sustainable basis?

Assuming that the number of patchouli farmers is approximately 50,000 then the number working...
in official sustainable programmes would be a “low single digit” or even 1%. However, this does not mean that others are unsustainable. Patchouli tends to be discussed as a monocrop and the only source of a farmer’s income. But this is not the case. In communities and areas that have been growing patchouli over long periods then these are not areas where patchouli is the main source of income since there are other crops or work that provide income. These groups are often working on a “sustainable” basis, but we do not expect them to change to patchouli to provide 100% of their livelihood. The problem arises when you have new communities planting patchouli, and prices rise to say $80/kg. Then, they decide to put all their land to patchouli, which is a recipe for disaster and in 12 months’ time it is not sustainable, and their soil is depleted. The plant is pulled, and they move to other areas.

If less than 5% of farmers are working under sustainability programmes what does it mean for the remaining 95%? Does it leave farmers with a lack of income or does it mean their methods are unsustainable and perhaps damaging to the soil and environment in general?

In some areas of Sulawesi, patchouli is a saviour for the farmers because of the low prices for competing crops, particularly cocoa and black pepper. This is why Sulawesi has become so important as a patchouli producer, which is a cash crop and so saves their livelihoods. One major company exporting for the past decade argued that farmers have been very happy with patchouli, saying there could not be a better crop for them. However, there are still major challenges, e.g. controlling disease.

A final comment on sustainability was that there is “no sustainability without traceability” and traceability is key. Traceability is there for only a very small percentage of production.

**Organic patchouli?**

There is a sizeable demand, perhaps as high as 100 – 200 MT, for organic patchouli but negligible volumes are produced. Fake certified organic patchouli is being marketed from India although tests suggest the oil was produced in Indonesia and contained pesticides. Some organic patchouli is produced in India but only very small quantities.

It will be difficult to satisfy demand because of the prevalent use of herbicides and pesticides in many parts of Indonesia, certainly forget about Sumatra and Java, and there
is even a lot in Sulawesi. Once you have estate crops then forget about organic patchouli. If you want to produce organic patchouli you have to go to virgin territory.

However, in parts of Indonesia, the government has declared that it wants to convert some areas to be organic. For example, in Bali, a wealthy part of Indonesia, the central government in Bali has declared that by 2025 it wants all of Bali to be organic and plastic free. Bali is relatively wealthy and wants to use Bali for high value agriculture. So, this is the place, but social issues are challenging. It is possible to have organic but there is a need to look for a special area.

**Patchouli and aromatherapy**

Over the past decade the overall demand for essential oils from the aromatherapy sector had grown significantly and a question was asked about the possible impact of the aromatherapy sector on patchouli. It was pointed out there had been no or very few clinical trials completed on the therapeutic benefits of patchouli – at least human trials. The demand and uses of patchouli have been quite stable.

The uses, application and therapeutic benefits have already been identified but in terms of it going to the next level it is going to need some clinical trials to validate or even find benefits that are currently not known.

Also well-known are the different aroma qualities and how it can be incorporated into other products, interest is there. There is certainly interest in encouraging and supporting sustainable production of any oils used in aromatherapy applications. End users want to support the programmes that are being developed and educate their customers about sustainably grown ingredients versus other products. Paying a premium is fair – and the need to encourage a virtuous circle.

**What about the government and patchouli?**

The Conference has attracted the attention of the government, so why can’t government get involved in encouraging sustainable production? There are several companies participating in the roundtable that are encouraging/advocating sustainable production, so why can’t the government get involved and invest in its own people?

From the central government viewpoint, patchouli is not the priority, but rather the main staple foodstuffs, e.g. rice and corn. Patchouli is on the priority list of the Ministry of Agriculture regarding seasonal plans but, in fact, they are not really paying much attention. A bottom-up approach has been tried by approaching the local governor/mayor/head of regency individually. This has been successful, in part because of budgetary constraints and competing demands. Could a top-down approach help to increase sustainability initiatives, including by the major companies in the F&F industry? It was reported that two senior economists from national committees on small scale industries and agrobusiness, who report directly to President Widodo were to attend the Closing Banquet. It was thought that these individuals should be introduced to the IFEAT Executive Committee. It was also suggested that besides the big companies, IFEAT, alongside DAI (Indonesian Essential Oil Council) and the Government, could support these initiatives in various ways.
Berjé has strived for excellence as a supplier and producer of Essential Oils, and Aromatic Chemicals since our early days in New York City. In those six decades Berjé has built an inventory of over 3000 ingredients that covers the esoteric to the everyday. Rigorous QC standards, comprehensive traceability programs, and our recent SQF certification have established Berjé as a top tier distributor.

With that foundation Berjé is breaking new ground on improving the industry’s standard of service. Coupled with Berjé Trakia, a European rose and lavender production facility, our global network of partners gives us the reach to sell in over sixty countries on six continents. As we further our commitment to promoting environmentally stable solutions, Berjé guarantees the quality of the past and the best practices of a sustainable business future.
The IFEAT Scientific Committee would like to inform all IFEAT Members that on 6th December 2019, at the meeting of the Standing Committee on Plants, Animals, Food and Feed (PAFF Committee), the European Union (EU) Member States decided not to renew the approvals of the active substances chlorpyrifos and chlorpyrifos-methyl currently authorised under the Implementing Regulation (EU) 540/2011 on Plant Protection products.

The European Commission formally adopted the Regulations on 10th January 2020. As a result, Member States had to withdraw their authorisations for plant protection products chlorpyrifos and chlorpyrifos-methyl by 16th February 2020, included as an active ingredient.

In addition, in accordance with Article 46 of Regulation (EC) No. 1107/2009, any grace periods of use that the Member States grant must end no later than 16th April 2020. After that, such plant protection products can no longer be placed on the market or used in the EU.

In parallel to the non-renewal authorisation of chlorpyrifos and chlorpyrifos-methyl, the EU intends to amend Annexes II and V to Regulation (EC) No 396/2005 to reflect a reduction of the EU Pesticides Maximum Residue Levels (MRL) for these substances to 0.01mg/kg (ppm).

Typically, transitional periods are granted starting from the date of publication of amendments to EU legislation through to their coming into force. It is yet unclear precisely when this legislation is to be published. As of today, implementation is expected around October 2020, probably without granting a sufficient transitional period. For reference, the draft text for the Commission Regulation amending Annexes II and V to Regulation (EC) No 396/2005 as regards the MRLs of chlorpyrifos and chlorpyrifos-methyl is available on the IFEAT website. Furthermore, so far, no allowance has been made to permit the sale and use of materials legally produced and imported before the deadline.

Both the non-renewal authorisation and the intention to reduce the MRLs for chlorpyrifos and chlorpyrifos-methyl were notified in time by the EU to the World Trade Organisation (WTO) Committee on Technical Barriers to Trade (documents G/TBT/N/EU/682 and 683 of 3 October 2019, available on the IFEAT website) and to the WTO Committee on Sanitary and Phytosanitary Measures (document G/SPS/N/EU/360 of 12 December 2019, also available on the IFEAT website).

Consequently, IFEAT recommends that all its Members with business interests in the EU initiate efforts to cease the use of plant protection products containing chlorpyrifos and chlorpyrifos-methyl immediately or as soon as possible.

IFEAT is working with other industry associations, its Membership and the competent authorities to request a longer transitional period after publication of the Regulation (EC) No. 396/2005 amendment and the allowance to have a period to dispose of materials legally produced and imported into the EU before the deadline. Indeed, this would help to both reduce market disruption to a minimum and to enable exhaustion of the stocks of processed and composite products compliant with EU Regulation before entry into force of the new MRL requirements.

IFEAT does not question the non-renewal of the approval of both substances nor does it doubt the outcome of the safety evaluations of chlorpyrifos and chlorpyrifos-methyl (as reported in EFSA expert statements dated August and November 2019). However, IFEAT recommends urgently exploring the possibility to grant transitional measures in order to avoid major trade disruptions due to the incapacity of the industry to comply with the lower EU Pesticides Maximum Residue Levels (MRLs) – to be set at 0.01 mg/kg (0.01 ppm) as of October 2020 – within a short period of time. Indeed, the planned developments on these two plant protection agents in the EU are taking place too quickly for the economic operators along the production and supply chains to be able to adapt to these changes, from the field to the final consumer product, in the time allowed by the European Commission.
EU CMR 2 CLASSIFICATION OF GAMMA-TERPINENE (γ-TERPINENE)

IFRA has taken the decision to self-classify γ-terpinene as Toxic for Reproduction Category 2 – H361 (CMR 2).

There is an EU REACH registration dossier of this ingredient with a CMR 2 self-classification. The lead registrant is a non-IFRA member and there is a co-registrant who is an IFRA member which has implemented this classification.

Following procedure, an IFRA team of experts (the IFRA CMR Working Group) and RIFM have contacted the lead registrant to get access to the data to evaluate the self-classification.

The conclusion by the IFRA CMR WG, after evaluation of the available information, is that γ-terpinene should be self-classified as CMR 2. Therefore, this classification is being implemented in the next version of the IFRA-IOFI GHS Labelling Manual 2019.

The RIFM Safety Assessment of this material has been finalised on 16th December 2019 and the final version of the assessment has been reviewed and approved by the Expert Panel for Fragrance Safety. The safety assessment will be prepared immediately for publication. The use of this material (added as such and contributions from naturals) is very low (0.0020 mg/kg/day). As such, the Expert Panel has concluded that the material is safe under the conditions of use.

The impact of this classification in essential oils is quite high given the numerous essential oils containing this constituent. Please note that the aggregate exposure data on this material includes the contributions coming from both the ingredient added as such and as a constituent of naturals. In fact, the exposure data of γ-terpinene was re-surveyed as part of survey 23 at the end of 2018 to account for contributions from naturals.

Should you have any questions or need clarifications please do not hesitate to contact Cristina Arregui at carregui@ifraorg.org

Additional information updates will be published in due course. In the meantime, please contact scientific.coordinator@ifeat.org with any questions or concerns.

More information can be found here: www.ifeat.org/project/scientific-information

This issue might severely affect several spices, herbs as well as essential oils and extracts produced from different plant materials. Particularly, for example, citrus fruits (current MRLs are 1.5 mg/kg (ppm) for chlorpyrifos and 2.0 mg/kg (ppm) for chlorpyrifos-methyl) and processed citrus oils from grapefruits, oranges, lemons, limes, mandarins and others, would be concerned. When the MRL is reduced to 0.01 mg/kg (ppm) as of October 2020, citrus and mint derived products, and many other essential oils used for foodstuff flavouring, will no longer be compliant with EU law in the short term.

Furthermore, even though the use of chlorpyrifos and chlorpyrifos-methyl will be prohibited in Europe starting from April 2020, both substances will likely remain as residues in the soil for a certain period before reaching zero levels. Indeed, studies have shown that the half-life of chlorpyrifos in soil can range from several weeks to over one year, depending on the soil type, climate and other factors.

Therefore, residues of both substances will most likely still be detectable in raw materials produced from 2020-2022 harvest years. It can be anticipated that certain processed products like citrus, mint and other oils will not be compliant with the MRL of 0.01 mg/kg (ppm) during this regeneration period.

Additional information updates will be published in due course. In the meantime, please contact scientific.coordinator@ifeat.org with any questions or concerns.

More information can be found here: www.ifeat.org/project/scientific-information
NEW IFEAT MEMBERS

Below is a list of new IFEAT members who had joined by 6th March 2020

ALLCHEMIX BV
Dasselt 55, 9400 Ninove
Belgium
Contact: Mr Alain Frix
Email: info@allchemix.com
Phone: +32 465 44 02 44
Web: www.allchemix.com
With 30 years of commercial experience in F&F ingredients (natural and synthetics), Alain Frix offers three services: consultancy, representation (agency) for Europe and special sourcing.

Aromatic & Allied Chemicals
B-8, Industrial Estate, C.B Ganj,
Bareilly - 243502
India
Contact: Mr Gaurav Mittal
Email: gaurav@aromaticandallied.com
Web: www.aromaticandallied.com
Aromatic and Allied Chemicals is a family business since 1977. They are leading producers of organic essential oils, mint oils and CO2 Extracts. A Fair Trade, ISO and GMP certified company.

Ayanda African Oils
Windemere Farm, Emoyeni,
KwaZulu Natal, 3800
South Africa
Contact: Mr Mathias Wessels
Email: mat@ayandaoils.com
Website: www.ayandaoils.com
Ayanda African Oils is a Co-op of farmers in South Africa – growing, processing and marketing a range of certified organic and conventional essential oils and hydrosols.

Balev EOOD
256 Varenechik Blvd. 9000 Varna
Bulgaria
Contact: Mr Ivan Topalov
Email: infolavenderoil.bg
Web: www.lavenderoil.bg
Balev EOOD specialises in Lavandula angustifolia oil cultivation and the production of lavender oil. Supplying the fragrance and beauty industry since 2010.

Camstar Herbs Ltd
Chestnuts Farm, Langton Green, Eye,
Suffolk IP23 7HL
UK
Contact: Ms Tracy Clark
Email: sales@camstar.co.uk
Contact: Ms Natalie Garnham
Email: natalie@camstar.co.uk
Web: www.camstar.co.uk
Camstar took over RWB Starke & Son in 2015 to extend the company's product range. Camstar is proud to produce the finest quality English essential oil by traditional methods.

Demirsoy Tarim Hayvancilik ve Gida Sanayi Ticaret Limited Sirketi
Arnavutkoy cesmesi sokak 12/1, 34135 Besiktas, Istanbul
Turkey
Contact: Mr Emir Demirsoy
Email: emir@demirsoytarim.com
Web: www.demirsoytarim.com
Demirsoy Agriculture was established in Turkey in 2014 to produce high value added products using new technologies, research and developments. Their key products are lavender, truffle and saffron.

Dr Willmar Schwabe Business Services GmbH & Co. KG
Willmar Schwabe-Str. 4, 76227 Karlsruhe
Germany
Contact: Ms Melanie Deck
Email: melanie.deck@schwabe.de
Web: www.schwabe-group.com/en
Dr Willmar Schwabe Business Services GmbH & Co. KG is a manufacturer of pharmaceuticals based on dried herbs and essential oils.

Flores Trade
Solanski put bb. Ulcinj
Montenegro
Contact: Mr Asllan Katana
Email: leftflavours14@gmail.com
Web: www.florestrade.com
Flores Trade opened in 1985 and specialises in producing essential oils such as juniper berry oil, laurel bay oil and Helichrysum oil with distillation method, harvested from plants grown in the Mediterranean (Balkan) area.

Gradishte Agro Ltd
1 Klara Eshkenazi str., 6200 Chirpan
Bulgaria
Contact: Ms Tsveta Lambreva
Email: tvseta@gradishte-agro.com
Website: www.gradishte-agro.com
Gradishte Agro Ltd are a young producer with a fresh unainted outlook and a determination to produce and sell 100% pure and natural Bulgarian essential oils.

HA GROUP International
Investment Group Corporation
239A Hoang Van Thu, Ward 8, Phu Nhuan District, Ho Chi Minh City 70000
Vietnam
Contact: Mr Duong Hong Hai (Peter)
Email: info@hagroups.com.vn
Web: www.hagroups.vn

After 15 years of development, HA GROUP has affirmed its No. 1 position in distributing natural essential oils in Vietnam and reaching out to the world!

Jiangsu Rich Native Animal Products Co., Ltd
Rm 1409, Building A, Phoenix Culture Square, 211 Jiangdong Middle Road, Nanjing
China
Contact: Mr Peng Bo & Ms Moonie
Email: pengbo@njrich.com
Web: www.njrich.com

Jiangsu Rich Native Animal Products is the biggest importer of citrus oil in China, with 20 years experience in importing clove oil.

Laxmi Essential Oil Oleoresins & Fragrance (P) Ltd
24/37, Gopal Bhawan, Birhana Road,
Kanpur - 208001, (U.P.)
India
Contact: Mr Lohit Shukla
Email: lohitshukla@gmail.com
Web: www.laxmiessentialoil.com

Manufacturers of natural essential oils, fragrances and flavours. They specialise in tailor-made product development as per customer requirement.
Lion Rock Essential Oils
Bushy Vales Farm, Southbroom, Kwa Zulu Natal
South Africa
Contact: Mr David Mitchell
Email: davidmitchell444@gmail.com
Lion Rock Essential Oils is based on the east coast of South Africa, growing and distilling a large proportion of the world’s Eucalyptus radiata oil.

Mamta Polycoats
244/P, Padra - Jambusar Road, Dhobikuva (Vill), Tal. Padra, Dist. Vadodara - 391140 India
Contact: Mr Pratik Shah
Email: pratik@mamtapolycoats.com
Web: www.mamtapolycoats.com
Mamta Polycoats is a manufacturer and exporter of non-toxic and eco-friendly citrate esters, mainly triethyl citrate (TEC) for the fragrance and flavour industry.

Metadynea Austria GmbH
Haffenstrasse 77, 3500 Krems Austria
Contact: Mr Thomas Nick
Email: thomas.nick@metadynea.com
Web: www.metadynea.com
Metadynea Austria was founded in 1949 as Krems-Chemie and is manufacturer of high-purity aroma chemicals as aldehydes, fatty acids, ketones and p-Cymene.

Natural Aroma Products Pvt. Ltd
485A/32A, Dilshad Garden Industrial Area, Ahinsa Compound, Opp.Dilshad Garden Metro Station, G.T. Road, Delhi - 110 095 India
Contact: Dr Pradeep Khandelwal
Email: info@naturalaroma.co
Web: www.naturalaroma.in
Natural Aroma Products Pvt. Ltd. was founded in 1995, to manufacture essential oils, aroma chemicals and natural isolates. They are leaders in Himalayan cedarwood oil, basil oil, spearmint oil, peppermint oil and spice oil.

Nishanth Natural Fragrance
M.R. Palli, Tirupati - 537502.
Chittoor Dist, Andhra Pradesh India
Contact: Mr Y. Nishanth Reddy
Email: nnf.george@gmail.com
Web: www.nishanthnaturalfragrance.com
Natural essential oils and aromatic oils “since 1988” The company cultivates conventional and organic oils in approx. 1,500 acres of land which includes contract process tying up with farmers in rural areas. All products are 100% pure and natural.

The Paperbark Co.
Harvey, Western Australia 6220 Australia
Contact: Mr John Day
Email: info@paperbarkoils.com.au
Web: www.paperbarkoils.com.au
The Paperbark Co. specialises in growing, steam distilling and marketing Australian essential oils and hydrosols, including Australian sandalwood, Fragion® and honey myrtle (amongst others).

PT Merpati Mahardika
 jl Panjang Arteri Kedoya No.21, Jakarta Barat 11520 Indonesia
Contact: Mrs Listianawati
Email: listianawati@gmail.com
Contact: Ms Michelle Setio & Aileen
Email: michellesetio@gmail.com
Web: www.mmnature.com
PT Merpati Mahardika supply natural botanical extracts and essential oils for food, cosmetic and pharmaceutical industries.

Pego d.o.o.
Trmedjia b.b. 88260 Cittuk
Bosnia & Hercegovina
Contact: Ms Sanja Cvitanovic
Email: gagropero@gmail.com
Web: www.pegoba.ba
Pego d.o.o. is one of the leading producers of 100% pure and natural essential oil of immortelle and floral water from Bosnia and Herzegovina. The company has a certificate by Ecocert from France.

Segev Food Export Import Co. Ltd
2 Sinai St. Ramat Hasharon 4742002 Israel
Contact: Mr Ofer Amitay
Email: ofer@segevfood.com
Web: www.segevfood.com
Family owned business for 32 years. Supplying citrus oils (orange, grapefruit, mandarin, D-limonene, folded oils) and seed oils (pomegranate, black cumin, jojoba).

Shanghai Fizztec International Co., Ltd
Rm 106-108, Bldg 10, No4361, Hutai Rd, Shanghai 201906 China
Contact: Mr Francis H. Zhang
Email: francis.zh@fizztec.com
Since establishment, Shanghai Fizztec International Co., Ltd is dedicated to becoming the leading imported aroma chemicals and essential oils supplier for the flavour and fragrance industry of China.

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