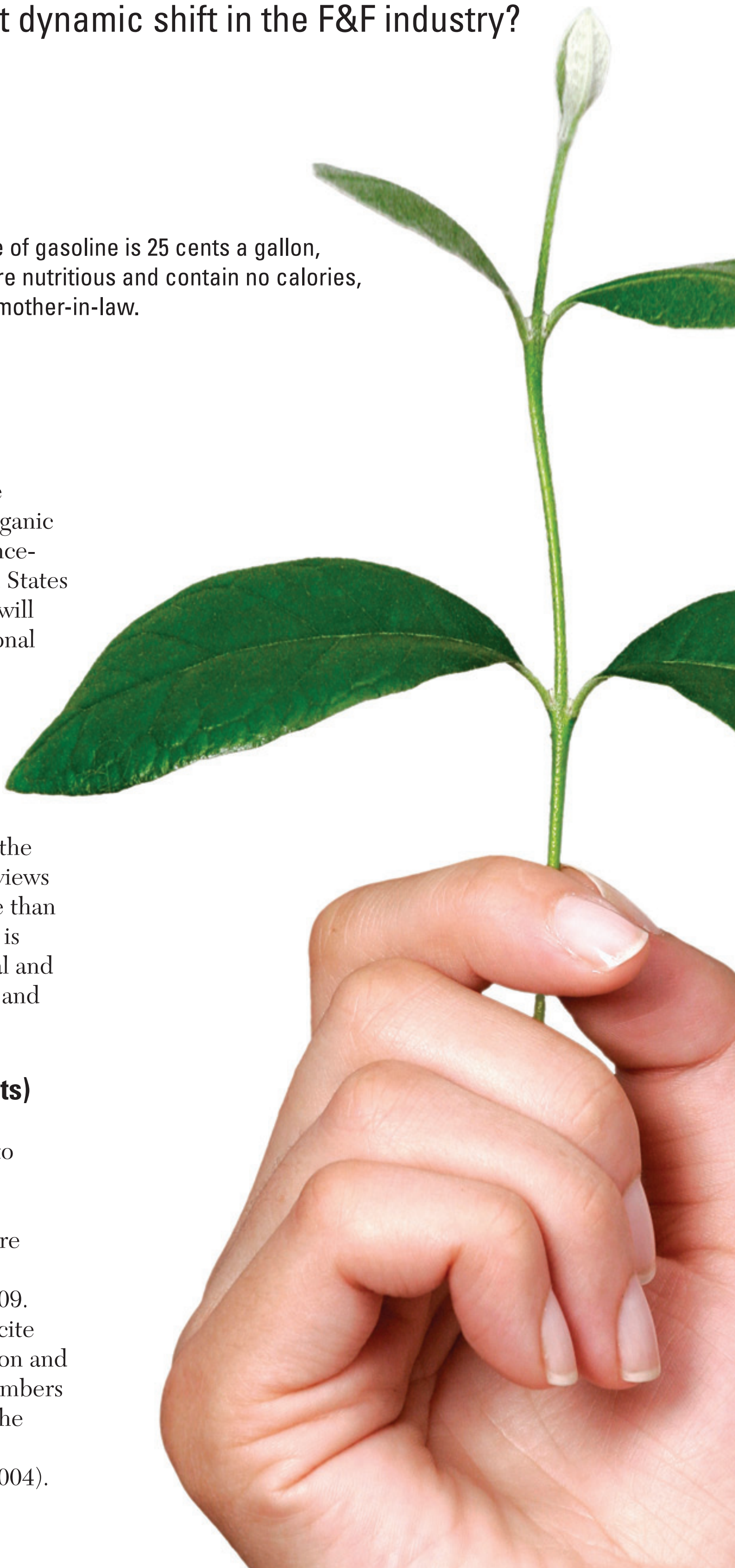
F&F trends

Natural and Organic: the Emerging Revolution

What's driving the biggest dynamic shift in the F&F industry?

Jack Corley, Royal Aromatics Inc.

Imagine a world in which the price of gasoline is 25 cents a gallon, where Starbucks Frappuccinos are nutritious and contain no calories, and where you actually like your mother-in-law.



Unrealistic, perhaps, but for those involved in the organic world, and organic personal care specifically, the announcement in August 2005 that the United States Department of Agriculture (USDA) will allow for USDA certification of personal care products was received with equal disbelief. Why? Because, just four months earlier, the organization declared that it would have nothing to do with certification of personal care products.

Fast-forward to 2006, and we see the emergence of an F&F industry that views the organic movement as much more than a short-term market aberration. This is indicative of nothing less than a social and lifestyle evolution among consumers and the F&F industry.

Consider the Facts (and Nonfacts)

The interest in organic and natural products in personal care continues to expand and grow. Market researcher Packaged Facts projects that the US natural and organic skin care, hair care and cosmetics market will grow from 2004's $5 billion to $7.9 billion by 2009. (Organic oral care and cosmetics, to cite just two segments, totaled $589 million and $336 million, respectively.) These numbers may seem modest, considering that the global personal care sector is about $150 billion in manufacturer sales (2004).

However, if you consider the fact that natural and organic personal care is a segment growing at a 25-percent rate, it takes on an entirely different meaning.

The increasing movement of consumers to healthier lifestyles, coupled with a growing fearful perception of the possible carcinogenic effects of certain chemicals, have encouraged the market to look for alternative products containing natural ingredients. In the United States, for example, consumer interest in natural and organic products has risen in conjunction with the demand for cosmeceuticals, aromatherapy and spa-type products.

It is important to remember that the economic paradigm is the same, whether you are creating a traditional skin care product or an organic one.

Growth has been attributed to baby boomers and Generation X consumers who increasingly crave safer nonchemical-based fragrances, shampoos, lotions, deodorants, toothpastes, etc. It is important to state here that the average consumer likely associates the adjectives "synthetic" or "harmful" with the term "chemical," as opposed to the true definition offered, for example, in J.W. Hill et al.'s *General Chemistry*: "A chemical substance is any material with a definite chemical composition, no matter where it comes from." Consumers, after all, are not, generally speaking, chemists. It is important to keep in mind that buyers' opinions often are shaped by misperceptions — a true challenge for all personal care industries.

More Online

To read more about consumer perceptions and expectations in naturals, visit *http://www.perfumerflavorist.com/articles* and download "Global F&F Trends: the 12 Truths of Naturals and the Consumer."

The Money Trail

Consumers perceive the term "organic" to represent a superior level of purity, wellness, and overall health and well-being. This can translate into big money for the F&F industry and personal care overall. A number of recent acquisitions lend credence to this trend. Colgate's major stake purchase in Tom's of Maine, for example, is just the most recent. According to Tom Chappell, CEO of Tom's of Maine, "More and more people are looking for safe and effective natural products from plants and minerals from a company that shares their values … we realized that we cannot meet this growing demand alone. We decided to seek a partner to help us."

Scott Van Winkle, managing director of equity research for international investment firm Canaccord Adams and an analyst in the natural products arena, said he expects Colgate to honor those promises, although it probably will impose "more of a corporate culture" on Tom's.

"Colgate has to keep [Tom's] the same for its brand integrity to remain," he said. "I can't imagine seeing the Colgate label on Tom's products anytime soon."

So, although customers' corporate structure might be changing, their focus on being perceived as natural/organic remains paramount.

Van Winkle said that the fact that an $11-billion company such as Colgate is willing to pay a valuation of $119 million for Tom's gives "a lot more validation for the natural personal care category." (L'Oréal's recent 652-mm euro offer for The Body Shop further reinforces the premise that natural is good business.)

Reuters recently reported that "the rising tide, it seems, does lift all boats — including even the largest ship, Wal-Mart Stores Inc. At the Reuters Food Summit in March, Wal-Mart announced plans to double its organic SKUs [stock keeping units] and become the 'mass-market provider of organic food.' "

Elaine Lipson, organic program director for New Hope Natural Media, parent company of *The Natural Foods Merchandiser*, was cautiously optimistic: "Wal-Mart has tremendous economic power, and I hope that within the organic realm it will use that power to uphold the integrity of the organic standards, and to help educate consumers about the meaning and benefits of organic farming.

"In the long run," Lipson continued, "I hope that Wal-Mart's decision means that many more consumers will learn more about how their food is grown and produced, and will make choices accordingly, and that more farmers will be able to find the funding, research and market support to make the transition to organic."

"Mass" market is an understatement for retailing's 800-pound gorilla. With $314 billion in sales in 2006, Wal-Mart is the world's largest retailer. It employs 6 million worldwide, operates more than 3,800 stores in the United States and nearly 2,400 more around the globe, and serves more than 138 million customers per week.

The implications of Wal-Mart's decision are far-reaching. It means that natural/organic products have broken out from the traditional health food/health and beauty care channel, and are exploding in mass-retail supermarkets, chain drugstores and now mass merchandisers.

The cover story in the April 2006 issue of *Global Cosmetic Industry* ("Sustaining Natural Growth," *www.gcimagazine.com/articles*) makes an excellent point in explaining that consumers' interest in natural and organic foods appears to extend to personal care products, as well. According to Jason Naturals' director of marketing, Laura Setzfand, "Most consumers are introduced to natural personal care through their interest in food. Enhanced packaging and marketing also are encouraging nonusers to try natural (and organic) for the first time, and formula improvements are changing the perception that natural products are less effective."

Another perspective on the emerging natural and personal care market comes from the financial community. "It's the same progress we saw in natural foods — the success of the naturals companies attracted the mainstream brands," says Van Winkle. So how soon might we see L'Oréal lavender essential oil shampoo or Suave 70 percent organic lotion? One to three years, he predicts. "The natural personal care market is growing like a weed. The market is probably bigger than we think."

Consumers are responding to the proliferation of new natural and organic personal care products throughout the world, which is coinciding with a whole slew of new natural and organic personal care marketing and advertising. Increased competition has resulted in targeted ads and communication support at the retail level, and companies are doing a good job of differentiating their product history, formulation, quality, brand and philosophy. Coty recently entered the field with its own organic personal care line under its Healing Gardens brand, which includes *Jasmine Therapy* cologne spray and *Green Tea* body mist. Similarly, Aubrey Organics has debuted its new line of natural and organic fragrances.

Challenges

The F&F industry faces several daunting challenges in the organic and natural arena — particularly in the supply chain area. Finding a reliable supply chain that can support all aspects of product development according to natural or organic requirements is the most serious hurdle. The supply chain for natural and organic ingredients used in personal care is evolving constantly. Specialists are emerging in all areas, from packaging to preservative systems. The challenge is balancing supply and demand. Customers are afraid to commit to projects because they view suppliers as evolving, with the availability of ingredients limited and prices too high. Suppliers are afraid to commit to farmers and ingredient processors unless *they* have a commitment from the customer. As more and more F&F/personal care companies step forward to meet consumer demand, the supply chain will evolve, and the issues concerning availability, quality and price will improve.

As we look into the crystal ball at the future, we see some interesting and challenging supply shifts occurring in the natural and organic area — particularly for essential oils. Wal-Mart's decision to expand its offerings in the organic agriculture area certainly will push the envelope in third-world countries to develop and cultivate more organic agriculture. And it should come as no surprise that India, China, Thailand, Vietnam, Indonesia and other countries are lining up to take advantage of this newfound market. The shift in supply of agricultural products to lower-cost labor markets is not new; we've seen this development unfold throughout the past 15 years in the essential oil market. What *is* new is the natural and organic F&F/personal care movement, which is challenging companies to come up with products that contain safe ingredients. The biggest selling point of essential oils is that they can offer consumers both olfactive and therapeutic benefits.

India and China stand at the forefront of the emerging supply chain. According to a recent article in the *Financial Times*, the value of essential oils as ingredients (natural extracts from herbs, flowers and wood used in fragrances and flavors, and as aroma-chemical feedstock) is more than $11 billion and growing at 8 percent per annum. India remains the largest producer at 17 percent of the world market, followed by China (15 percent) and the rest of the Pacific Rim (8 percent), Latin America, North Africa, Eastern Europe, Europe and the United States.

India and China are not only the largest producers of essentials — they are also the *fastest-growing* producers. In addition, these countries are conducting more and more value-added research and development into the properties of essential oils to satisfy company and consumer demand, as well as to protect and retain their positions in the market.

India and China also are seizing the opportunity to become leaders in the certified organic arena. A number of well-known international certification associations have set up shop in both countries in reaction to the increased demand for organic certification for a whole host of agricultural products. Although still in an embryonic stage, the need for organic certification in light of Wal-Mart's strategy could be staggering in the next couple of years.

Regulatory, Definitions and Labeling

Manufacturing and marketing natural and organic personal care products presents many challenges for those companies that wish to comply with USDA regulatory standards in accordance with the National Organic Program (NOP).

As previously mentioned, last year the USDA reversed its original position and agreed to regulate organic personal care products with this statement:

"There are agricultural products, including personal care products, that, by virtue of their organic agricultural product content, may meet NOP standards and be labeled as '100 percent organic,' 'organic' or 'made with organic,' pursuant to NOP regulations. Businesses that manufacture and distribute such products may be certified under the NOP, and such products may be labeled as '100 percent organic,' 'organic' or 'made with organic,' as long as they meet NOP requirements."

This now allows companies that manufacture personal care products in accordance with NOP requirements to make reference to this in their product labeling, if they so desire.

As mentioned earlier, "organic" is no longer a foreign term to consumers, but there is still confusion about its exact meaning. (Consumer fuzziness on definitions of key industry terms such as "organic," "natural" and "chemical" continues to plague the industry.) Simply put, "organic" is a method of growing and processing natural ingredients under controlled conditions that must meet stringent purity standards. It is a system of crop cultivation employing biological methods of fertilization and pest control as substitutes for chemical fertilizers and pesticides. In general, these regulations prohibit the use of genetic engineering (GE), ionizing radiation and sewage sludge. However, contrary to popular perception, organic is not a formal health claim, although perhaps this will change in the future.

Although most organic producers may see personal care as marginally related to their organic endeavors, the expansion of organic standards to cover the sector continues to have profound conceptual and regulatory implications for the entire organic industry.

Fervent organic supporters consider personal care products to be notoriously underregulated. Any number of chemical and synthetic additives can be used in their processing.

It is widely accepted in the industry that consumers buy organic fragrance/personal care products under the illusion that the items are held to organic food standards. Despite this awareness, the word "organic" is used on the labels of products that often contain toxic materials that do not comply with NOP guidelines.

The NOP regulations are fairly clear on what is and what is not organic. Aside from the general categories previously mentioned, the National List of Allowed Synthetic and Prohibited Non-Synthetic Substances details exceptions to organic standards (*www.ams.usda.gov/nop*). New standards for organic personal care products are currently under review and likely will be published before the end of this year. The goal of the improved standards is to promote sustainable agriculture, elevate integrity in organic personal care products and impose penalties on violators.

Interestingly enough, all organic products are natural, but not all natural products are organic. Although the number of companies engaged in organic agriculture and processing is increasing, there are far greater numbers of companies participating in "natural" product manufacturing and marketing.

And there is far greater abuse and misuse of the term "natural" in marketing, labeling and packaging due to the fact that it is completely unregulated. There are, of course, advocacy organizations that are trying to promote natural via a whole host of eco-labeling mechanisms, but consumers need to be wary, as the word "natural" often is just that … only a word.

According to a recent article in the *Financial Times*, the value of essential oils as ingredients (natural extracts from herbs, flowers and wood used in fragrances and flavors, and as aroma-chemical feedstock) is more than $11 billion and growing at 8 percent per annum.

Fragrance

Next to finding an organic preservative system that really works, the fragrance area represents the greatest challenge for personal care companies. Studies indicate that only around 2–3 percent of all personal care products contain natural or organic fragrance. This is amazing when you consider that fragrance is one of the main criteria in consumer choice of a personal care product.

There are many reasons for this low percentage. Natural and organic personal care is an "emerging" product category, and the need for good fragrance and perfumery, until recently, has not been a requirement. Substantivity and complexity are common attributes of traditional perfumery, where perfumers can work with thousands of aroma chemicals and molecules.

Studies indicate that only around 2–3 percent of all personal care products contain natural or organic fragrance. This is amazing when you consider that fragrance is one of the main criteria in consumer choice of a personal care product.

The building blocks for these aroma chemicals are either crude sulfate turpentine or petrochemicals that generally do not meet the definition of natural and almost never of organic, as I just reviewed.

In order for perfumers to create natural or organic fragrances (with organic being even more limiting, due to more structured certification and licensing requirements), they must work with essential oils, botanical extracts, tinctures, resinoids or vegetable oils. Generally, among this group, only essential oils, tinctures and resinoids have olfactive value.

Unfortunately, most perfumers today have limited experience in working with these ingredients and have been trained to create fragrance using a proliferation of aroma chemicals. If essential oils are used, it is often done more for marketing reasons than for olfactive reasons. Why? Many perfumers favor the use of synthetics in fragrance creation to achieve interesting/novel effects. In some cases, synthetics provide flexibility and cost savings that cannot be found in naturals/organics. Further complicating matters is the fact that concretes and absolutes are almost always produced via petrochemical solvent (i.e., hexane) extraction from flowers, and thus cannot meet organic standards.

The desire to have more substantive and complex fragrance notes is now becoming more prevalent in natural and organic personal care briefs — a tall order, but a necessary one. It simply makes little sense to produce a skin cream, body lotion or shower gel that is 100 percent natural or organic, only to add a synthetic fragrance to the product.

One trend in naturals/organics is that companies' desire to maximize the natural or organic content in personal care product development — either for therapeutic reasons or simply for marketing appeal — results in a strict adherence to single-theme olfactive notes (i.e., lemon, bergamot, lavender, rosemary, peppermint and eucalyptus). There are a few reasons for this. First and foremost, labeling is unforgiving. If you use a synthetic fragrance in your product, you likely will need to declare it. So, a number of natural and organic personal care companies have elected to obtain odor from natural or organic essential oils — particularly those that are more prevalent, such as lavender, lavandin, peppermint, orange, lemon, etc. This has been the extent of their perfumery. But, as I mentioned a bit earlier, companies need to challenge themselves. Fragrance is one of the key purchasing criteria used by consumers in selecting a personal care product. As this category matures, companies are going to have to work harder to distinguish themselves.

Another reason for the persistence of single-theme olfactive fragrances in naturals/organics is that naturals tend to be expensive. Even if a company could source an organic fragrance, it would be concerned about the cost impact on the finished product. Ironically, there is a fallacy that I would like to try and dispel. Yes, fragrances — particularly those made with organic essential oils — can be expensive. But companies in the personal care business need to focus more carefully on what that fragrance "expense" really represents in terms of the overall product cost. Generally, fragrance load levels in lotions and creams are low, ranging from 0.5 percent to perhaps as high as 2 percent, depending upon the application. The impact on product cost is far less than the cost of surfactants or new nonparaben-based preservative systems. And let's not forget the expense of the bottle, label and, yes, all that marketing. It is important to remember that the economic paradigm is the same, whether you are creating a traditional skin care product or an organic one.

My point is that product developers of organic and natural personal care products should consider fragrance to be a key criterion when creating their personal care products. They need not shy away from organic fragrance due to cost or availability any longer. The availability of organic essential oils, vegetable oils, botanical extracts, tinctures and resinoids is far better today then it was just a couple of years ago. For example, it would have been next to impossible five years ago to find lavender, lavandin, orange, peppermint and many other essential oils as "certified organic." If you did, you might find just a few kilos at an extremely exorbitant price. Today, production of certified organic lavandin oil produced in France is big business, resulting in 30,000–40,000 kg or more per year. And two years from now there will be far greater choices and quantities available as the demand for natural and organic personal care continues to grow and evolve. The good news is that organic fragrances can and do exist. We'll discuss more about that in a minute.

I have found semantics to be a big problem in promoting organic "scents." Many health and beauty care companies presume that the word "fragrance" means synthetic. It does not, as history tells us. About 4,000 years ago, Egyptians were busy concocting fragrances containing myrrh, cinnamon, rose, galbanum and olive oil, referring to incense as "the fragrance of the gods."

In 1792, Jean Marie Farina created the famous *Eau de Cologne*, based on Italian citrus oils of neroli, lemon and bergamot combined with French lavender and rosemary. This natural perfume became known as the first popular "bouquet" and was the genesis for the custom fragrance manufacturing industry. Farina's bouquet led to the creation of the fragrance *4711*, named after the address of the building in which it was invented, 4711 Glockengasse, Cologne, Germany. There was nothing remotely synthetic about *4711*. Back in those days, there were no pesticides, aroma chemicals or other products that could violate an organic claim!

Back to substantivity and efficacy. Perfumers today are "limited" to working with essential oils, tinctures, resinoids and botanical extracts in creating organic fragrances. Anthony Caputo and his creative staff at Royal Aromatics have spent the past three years creating blends using these organic ingredients to give customers what they want: more substantive and complex fragrance notes. When asked about the challenges he has faced throughout the years, Caputo summarizes it like this: "My experience and training always have focused on creating fragrances using aroma chemicals. When first faced with creating without products such as Galaxolide (IFF), Hedione (Firmenich), Cedramber (IFF) and many other aroma chemicals, and working ostensibly with essential oils, I struggled. I really had to go back to my roots to understand the synergies, chemotypes and complementary nature of these essential oils. The more oils I could get my hands on, the more creative I became. The learning curve of our creative team has grown as more and more organic essential oils become commercially available. Initially, I did not think it could be done, but you can create wonderful complex bouquets with patience and perseverance. I would, however, like to see more in the way of organic and natural floral and musk notes."

Beyond Essential Oils

Caputo and others involved in natural fragrance creativity still desire more substantive, unique and complex notes with which to create. These likely will come to perfumers from flavor and fragrance companies that are focused on value-added products and technology. These include natural isolates, or fractions, processed without petrochemical solvents, chemical catalysts or mediums. The technology is not new. Fractionation is a method of isolating certain naturally occurring volatile active components in botanicals and plants using simple steam distillation or more sophisticated molecular and supercritical carbon dioxide distillation methods. These volatile active components can produce extremely concentrated notes or flavors that add value to a fragrance or flavor compound.

Market researcher Packaged Facts projects that the US natural and organic skin care, hair care and cosmetics market will grow from 2004's $5 billion to $7.9 billion by 2009. These numbers may seem modest considering that the global personal care sector is about $150 billion in manufacturer sales (2004). However, if you consider the fact that natural and organic personal care is a segment growing at a 25-percent rate, it takes on an entirely different meaning.

The great appeal is that these isolates are produced via methods that not only qualify them as natural, but organic under the NOP, as well. For example, analysis of the chemotypes (isolates) in a sample of ylang-ylang oil reflects key natural components, including natural germacrene, natural β-caryophyllene and natural benzyl acetate. 1,8-Cineole occurs naturally in Spanish and Tunisian rosemary oil, and can be isolated and used as a concentrated note in fragrances. The same can be said of natural linalool and natural linalyl acetate, which are key chemotypes in French lavender oils.

As demand increases for organic flavor and fragrance ingredients, the greater the availability will be. Companies such as Citrus and Allied Essences Ltd., a flavor and fragrance ingredient manufacturer based in the United States, have made a significant investment in natural and organic chemotype fractionation. Stephan Pisano, a vice president in the organization, believes that the investment is timely and necessary in order to support the demands of its customers. Other manufacturers will follow. I expect India to become an important player in the natural and organic fractionation area, as well.

New isolates that qualify as organic will provide perfumers, flavorists and other formulators with the ability to create better-quality products that meet organic standards and add value to their finished products. However, some ingredient manufacturers are taking a "wait-and-see" attitude before committing resources, because the organic personal care market is just beginning to emerge, and there is some reservation about "applying" for and participating in the organic certification process. Frankly, it is not a complicated process. It is rigorous, but not complicated.

In summary, an increasing number of consumers want organic products. Recent company acquisitions and new product introductions reflect how the markets are reacting to this consumer demand for healthier personal care products. There is a need for new, functional and olfactively pleasing fragrance ingredients to support consumer preference in natural and organic fragrances.

Address correspondence to Jack Corley, Royal Aromatics Inc., 3535 Route 66, Parkway 100, Building #2, Neptune, NJ 07753; jack@royalaromatics.com.

To get a copy of this article or others from a searchable database, visit the P&F *magazine Article Archives at* www.perfumerflavorist.com/articles p&f