Crucial raw materials

The State of Vanilla

Challenges, pricing, trends and applications

onfections, candles, baked goods, fine fragrances, ice cream, lotions, sodas, oral care, snack foods: vanilla is arguably one of the most popular flavor and fragrance materials. In addition to its inherent versatility, vanilla is also one of the industry's most economically/geopolitically unstable materials. This month, *P&F* talks with a diverse panel of experts for their take on vanilla's immediate future, emerging novel applications, new sources and more.

The Next 12 Months

We asked our experts what they saw as the major challenges involving vanilla over the next year. Premier Vanilla Inc.'s Arvind Ranadive said, "The biggest challenge is to increase the growth in pure vanilla consumption. The vanilla industry lost anywhere from 25-40 percent of the pure vanilla market in the last three to four years due to excessively high vanilla bean prices."

But panelists agreed that getting industrial consumers to exploit the current vanilla supply was just one key solution. Daphna Havkin-Frenkel of Bakto Flavors said the industry must "make sure that the farmers are producing good quality beans (since the farmers cannot sell the beans, many of them are not even picking them and curing them)." Havkin-Frenkel warns that if this advice is not followed, prices will again rise, in tandem with lowered quality. This, she says, could scare industrial consumers away from vanilla for good. Simon Poppelsdorf of Bell Flavors & Fragrances elaborates on this threat: "The biggest challenge...is to survive the roller coaster on bean prices, in addition to winning back customers that went to WONF or artificial replacements for the natural extracts." Thomas Grys of Borregaard has a somewhat different take: "lower vanilla bean prices...[are] not expected to have any impact on vanillin demand, as vanillin still is a far more cost competitive product."

Stability and affordability are the engines of use and innovation. Oliver Nembach of Symrise notes that it is absolutely key that the industry "return to realistic, fair [vanilla] prices, hopefully in the long term, to enable manufacturers and brand managers to realistically design and steer new product developments and launches." If indeed stability and good production-consumption ratios are vanilla's hope, it may not be much comfort to most industrial consumers (or suppliers and growers) when Virgina Dare's Rick Brownell points out: "Now we have worldwide production at roughly double what is consumed. This is likely to continue to be the case at least through the end of the decade."

Soda Aromatic Co. Ltd.'s Ko Tsurumaki, on the other hand, views the next year's challenges from a different angle, seeing true opportunities: "bringing wider vanilla acceptance to Japan and enhancing materials' character." To Tsurumaki, the main strategy must be "new development of vanilla ingredients (extracts, oleolesins and flavor compounds) to meet the taste and odor preferences in each country."

Effects of Pricing

When supplies fluctuate and political and environmental factors continue their unpredictability, material costs are bound to seesaw. Our experts have a lot to say about the effects of such wavering fortunes, particularly vanilla's somewhat harmed reputation.

Daphna Havkin-Frenkel says that, because of uncertainty over pricing, "Many companies reformulated to use less vanilla of high quality — and sometimes [even employ] synthetic and natural replacements. The ice cream industry is the one with a serious problem. If you check the supermarket the prices of good vanilla ice cream have increased (or

the size of the box has decreased)." In fact, Oliver Nembach notes that vanilla use in the industry has been reduced by almost 50 percent from 2004 to 2005. He continues: "Since the market price decrease [in 2005], the market has returned to its normal position; however, users will become more vigilant and aware when formulating with vanilla in an effort to protect against another 'crisis." It is this development that Nembach finds worrying. "Re-engineering formulas can be a significant issue for many users; once a recipe is reformulated, it is seldom reversed, even if the vanilla market returns to normal." Rick Brownell, too, has noticed the trend of reformulation. '[N]atural vanilla has been replaced [in some instances] by substitute products..."

Simon Poppelsdorf sums up, noting that pricing fluctuations have "created a lot of uncertainty in a market of people not sure where to go, whether to wait or to take action." But he does take an ultimately optimistic view. "I think we have finally got to the bottom of the price for the beans, and that will enable the industry to get back to normal."

The biggest challenge [over the next 12 months] is to increase the growth in pure vanilla consumption.

—Arvind Ranadive

Novel Applications

With the rise of vanilla in everything from new versions of Diet Coke to toothpaste to home/environmental fragrance, this important ingredient is more ubiquitous than ever. In addition to having identified growing opportunities in organic foods, Rick Brownell says, "We have seen a great deal of interest in vanilla in non-traditional applications. Oral care is one area — including toothpaste, mouthwash and lip balms. Another area is savory applications — sauces, soups, stews, salad dressings, etc." Ko Tsurumaki has seen applications of black vanilla seeds into custards, cream puffs and biscuits, as well as in various flavored coffees.

Oliver Nembach takes one step further, identifying coffee applications as a gateway to vanilla's growing range of uses. "Concepts like coffee with French vanilla, vanilla-mint and many other vanilla background flavor enhancements will influence our markets and eating habits in the near future...Recently, more attention has been given to intrinsic health and wellness components and functional aspects related to wellbeing. These functional ingredient trends will continue to drive the food industry's demand for botanical-derived ingredients such as vanilla."

Meet our vanilla experts

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Sourcing: New vs. Old

In a year that has witnessed tsunamis, floods, hurricanes, and other natural and geopolitical traumas, considerations of sourcing are more urgent than ever. Premier Vanilla's Arvind Ranadive suggests direct sourcing may be the key. "More and more vanilla bean users are buying beans from suppliers in the country of origin rather than through a third party. Even the growers in countries like India, Uganda and Papua New Guinea are offering their cured beans directly to end users rather than selling them through middlemen."

Soda Aromatic's Ko Tsurumaki appears to concur with Ranadive's observations on this growing globalism: "In accordance with the recent poor crop in Madagascar, we are considering direct purchase sourcing...With the recent steep rise in the market price, we are trying to maximize

the yield from vanilla beans. We also try to have enough stock — around three times as much as the average year."

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Oral care is one area... another area is savory applications.

—Rick Brownell

Though vanilla consumers must contend with the consequences of local environmental and economic issues, Symrise's Oliver Nembach notes that "[w]e have seen many advances in extraction, yield improvement methods and expanse of the global growing regions in Southeast Asia and Africa." And while vanilla agriculture is largely practiced in a traditional manner,

Rick Brownell of Virginia Dare says that a significant development has been "the emergence of a large supply of vanilla beans from Papua New Guinea [PNG]. From virtually no position just a few years ago, PNG is now the third largest producer in the world. PNG beans are different, primarily Tahitian type, but their introduction was a major contributor to the market crash last year."

Thomas Grys of Borregaard adds that China's entry into the vanilla market has exacerbated price and margin pressures. Says Grys, "One western vanillin producer even had to close down in 2005. Still, the high focus on quality and environmental considerations will lead to increased cost in China." In addition, due to the emergence of these newer vanilla sources, Bell's Simon Poppelsdorf notes: "there is no doubt that Madagascar and Indonesia's...market share will drop."

As for emerging giants, Ranadive has mixed news—and a question mark: "Uganda produced around 100 mt of cured beans in 2003. India has increased its production to about 100 mt of cured beans, and has a potential to produce 500 mt in the next five years...It will be interesting to watch if Indian vanilla growers continue to increase their production in light of the fact that vanilla bean prices are currently quite depressed."

Rick Brownell of Virginia Dare feels that not all new sources are created equal. "Uganda has re-emerged as a major producer of vanilla beans. They have the cost structure and curing expertise to continue to expand market share. Indian vanilla has been somewhat disappointing in terms of quality and pricing. We don't expect them to be a major factor going forward, except possibly in their own market."

Bakto Flavors' Daphna Havkin-Frenkel sees a mixed bag of opportunities and risks ahead among emerging sources. "If the quality from Uganda and India is high, it will give companies more choices for suppliers...I strongly believe that India has the potential to stay in the market, and since it's a democracy, [the West has] easy access to deal with the people there."

Still, much of the talk surrounding new sources is speculative at best. Says Bell's Simon Poppelsdorf: "We should not overestimate the volume coming from Uganda and India — it is probably less than 10 percent of the [global] total... and it remains to be seen what will happen with the commitment of the farmers in Uganda and India when the prices remain at the current levels."

Says Oliver Nembach: "If these regions can meet the organoleptic standards of our industry...[t]hey may become significant influences..." But cost advantages, he says, cannot be the sole consideration for these regions. "Several countries entered into [the vanilla] business with agressive pricing during the years of the crisis — today, this cost advantage is

gone. Competition is always healthy, and may affect a whole new level of vanilla extracts, especially in North America..."

On the Horizon

Given the industry's gun-shy attitude towards vanilla, one is left to wonder about its future. On the con side, geopolitical, environmental and weather issues continue to make sourcing and pricing unstable. In addition, this instability causes manufacturers to reformulate to do without natural vanilla, a process unlikely (in many cases) to be reversed even if vanilla markets stabilize. Finally, though new sources are on the horizon, their performance is often unproven and theoretical, at best. On the pro side, vanilla will continue to benefit from consumers' growing desire for all things natural. In addition, novel applications for the material outside of traditional categories will further grow demand. Finally, simply put, the world just loves vanilla and will never want to do without it! Whatever the outcomes of various factors, it is beyond question that vanilla — one way or another — is here to stay. p%f