2012 Flavor & Fragrance Leaderboard

Acquisitions, raw material price pressures and an uncertain economy make for a mixed picture

In 2011, the global flavor and fragrance market totaled an estimated $21.8 billion, down from $22 billion in 2010. In 2009–2010, the market had grown from $20 billion to $22 billion, compared to a drop in the financial crisis of 2008–2009, in which global sales fell from $20.3 billion to $20 billion.

Another number to watch is the percentage of the market represented by the sales results of the top 10 companies. In 2007, the top-ranked companies comprised 68.7% of the total market. Today, the top 10 flavor and fragrance companies comprise 75.1% of the total. These companies are finding new opportunities in emerging markets and differentiating offerings such as taste modulators, while also facing raw material price instability and ongoing industry consolidation.

A Note on Rankings

The 2012 Flavor & Fragrance Leaderboard rankings are based on 2011 sales data—including estimates*—gathered by *Perfumer & Flavorist* magazine and John Leffingwell, who provided the majority of the tabulations and market share estimates.** Rank is based on US dollar equivalents. Conversions are based on major currency rates as of Dec. 31, 2011, unless otherwise noted.

* *See individual rankings for details.*

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Compare 2011 and 2012 Leaderboards

The 2011 Flavor & Fragrance Leaderboard will be posted on *Perfumer & Flavorist's LinkedIn* group starting July 9, 2012; visit *www.linkedin.com* to access this story and compare last year's results and insights with today's.

To this last point, two companies have grown significantly since the 2011 Flavor & Fragrance Leaderboard was published. Kerry has acquired Cargill Flavor Systems, SuCrest and Flavourcraft, all of which will likely push the company into the 2013 top 10 list. Meanwhile, Wild Flavors has acquired certain assets of A.M. Todd, in addition to purchasing Cargill's juice blends and compounds business. To acknowledge this growth, both companies are profiled this year in a special **F&F Movers** section at the end of the Leaderboard list.

And so we are pleased to present *Perfumer & Flavorist* magazine's 2012 Flavor & Fragrance Leaderboard, a ranking—by 2011 sales—of the top 10 companies, with select exclusive insights from key executives on the state and future of the industry.

1 Givaudan

Givaudan

Geneva
2011 sales: CHF 3,915 million/$4,171.3 million
Estimated market share: 19.1%
CEO, Executive Committee Member: Gilles Andrier

Gilles Andrier; courtesy of Givaudan

"The business achieved a strong sales momentum in a tough environment and a significant profit improvement in the second half of the year," said Givaudan CEO Gilles Andrier during the release of the company's 2011 results. "We are well on track for 2012 and to deliver on our mid-term targets."

Currency and Ingredient Costs

The Swiss company has saw its EBITDA and net income decline to CHF 758 million and CHF252 million, respectively, in 2011 due in part to the strength of the Swiss franc against the US dollar and other currencies. At the same time, the company's gross profit margin decreased to 42.6% for full-year 2011, compared to 46.1% in 2012, as a result of the "sharp and broad-based" increase in raw material costs. The raw material costs also created inventory increases—in concert with effects of SAP business management software implementation in Asia—causing an operating cash flow decline year-over-year of CHF456 million. To alleviate the ingredient cost issue, Givaudan, like its competitors, initiated price increases with customers, which are coming to fruition this year. According to the company, "During 2012, the company will continue to work in close collaboration with its customers to make the necessary adaptation of its prices to reflect the sharp increase in input costs."

Efficiencies

The company, meanwhile, will benefit currency-wise from the relocation of its flavor production to Hungary, raising Givaudan's full-year net investments in property, plant and equipment to CHF176 million. The centralized flavor production facility near Makó, Hungary, is slated to be fully operational by first quarter 2013 and will produce culinary flavor blends, seasonings and spray-dried flavors that are allergen-free and marketed primarily to the savory packaged foods segment. This will support the company's initiatives to grow globally in savory flavors, as well as meet demands in fast-developing markets.

With the full rollout of SAP, the company will pursue shared service initiatives, supply chain efficiencies and reduced working capital levels.

Future Growth

Mid-term, the company's overall objective is to grow organically 4.5–5.5% per year, assuming a market growth of 2–3%, and to continue on the path of market share gains over the next five years by focusing on developing markets, health and wellness, market share gains with targeted customers and segments, research, and sustainable sourcing. By 2015, the company says it hopes to improve its annual free cash flow to between 14% and 16% of sales.

Investments

In 2011, further investments were approved to expand the infrastructure in the developing markets. For example, in Moscow, the creative and commercial teams moved into new and expanded offices, while in India Givaudan added additional floor space to expand the creative and development center in order to meet the demands of this high-growth market. The year also saw the further expansion of the production capabilities in the fragrance ingredients manufacturing site in Pedro Escobedo, Mexico. In Singapore, a state-of-the art creative, commercial center and a high volume production center was approved during the year, which should be operational in 2013.

The fragrance ingredients unit at the company's Naarden, Netherlands, site ceased production at the end of 2011. Further investments in reaction and distillation capacities have been made in the ingredients manufacturing plant at Pedro Escobedo in Mexico, which is now operational.

An expansion of the production site in Argentina is being implemented to accelerate growth in the beverage category, while expanded spray drying capacity is nearing completion.

Fragrance Highlights

Price increases contributed to Givaudan's fragrance sales results beginning last year, in addition to growth in consumer products, particularly in the developing markets of Latin America and Asia-Pacific.

Fragrance ingredients sales increased by 0.7% in local currencies in 2011. "Price increases in all product categories compensated for the decline in volume, compared to the previous year," according to Givaudan. Sales of specialties showed a modest growth while the remaining product categories recorded slight declines in sales, partially driven by destocking.

Fine fragrance sales grew by 0.2% against the very strong comparables of the previous year. According to the company, "Growth increased in the second half of the year driven by a strong pipeline of new wins across all major customer categories and distribution channels."

Consumer product business unit sales increased across all customer groups as well as all regions. Sales in developing markets grew faster than sales in mature markets. Asia-Pacific reported strong growth led by international customers, especially in the fabric care segment, with China, Indonesia and Vietnam recording the strongest increases. All customer groups contributed to the growth in Latin America, with an excellent performance in Mexico. In Europe, Africa and the Middle East, sales increased across all customer segments, particularly in the developing markets. In North America, sales growth was driven by local and regional customers, with a double-digit increase in both fabric care and home care. Sales in fabric care and oral care achieved double-digit growth. Home care sales also rose, especially in Asia-Pacific, while personal care sales were flat despite the good performance in the hair care and deodorant categories.

Flavor Highlights

Givaudan's flavor division reported that developing markets increased at near double-digit growth in 2011, versus 2010, while the mature markets delivered above average growth. Beverage, savory and snacks categories were the strongest, while the overall business benefited from a focus on developing markets, health and wellness programs, and market share gains with targeted customers.

Asia-Pacific achieved a 10.5% growth in local currencies, with the developing markets of China, India and Vietnam recording double-digit gains. Indonesia delivered a high single-digit increase. The mature markets of Japan and Oceania also posted gains. Growth registered across all segments, including beverage, dairy, snacks and savory, and the areas of food service and health and wellness.

Flavor sales increased 5% in local currencies in Europe, Africa and the Middle East. The developing markets of Africa, the Middle East and Russia achieved high single-digit growth. The mature markets increased, mainly in Germany, Ireland, the United Kingdom and Spain. The region recorded expansion across all segments, led by savory and snacks. Double-digit growth was achieved in the key areas of health and wellness and food service.

In North America, flavor sales increased 1.4% in local currencies. "Volumes continue to be depressed, with the main gains coming from new wins in beverages and snacks," according to the company. Food service customers and new wins in the beverage and dairy segments helped growth, as did health and wellness.

Latin America, Argentina and Chile recorded double-digit gains, while Brazil and Mexico improved based on new wins. Strength was notable in beverages, snacks and sweet goods segments; in addition to health and wellness customers focused on sweetness enhancement.

First Person: Givaudan

Recently, P&F magazine *asked Givaudan for its insights into business drivers and other key issues. What follows is the company's outlook on a range of crucial topics.*

Key 2011 Business Drivers

Givaudan presented a solid sales performance across its fragrance division and flavor division in 2011, despite an uncertain economic environment caused mainly by rises in raw material costs. Sales in developing markets for both divisions as well as in fragrance consumer products contributed to these strong results.

Worldwide, consumers remain at the heart of Givaudan's business. In food and beverages, consumers covet nutritional reassurance, clean labels, good value, new eating experiences and great taste, without compromising on quality and safety.

Fragrance consumers seek products that delight, excite or provide other key benefits, and our fragrance division has launched an in-depth research program to help customers design such products.

Givaudan's flavors business in the mature markets was driven by increased demand for healthier and more natural products. Our commitment to health and wellness enabled us to meet this demand with numerous TasteSolution products and technologies, notably in the areas of reduced fat, sugar and salt content. The food service segment also fueled growth.

The regulatory landscape continued to shape both sides of our business in the mature markets. In the United States and Europe, the trend for increased food safety and ingredient transparency continued, while regulatory pressures influenced fragrance creations as well as the number and types of new aroma chemicals brought to market.

We continued to profit from the shift of purchasing power to the developing markets that provided significant growth opportunities for both divisions. Higher demand for packaged food and beverages, as well as household and personal care products, was driven by urbanization and a rise in disposable income. For the first time, flavor division sales in developing markets grew at twice the rate of those in developed markets. The fragrance division grew four times faster in these markets, contributing to total group sales in developing markets rising to 42%.

Fair trade, ethical sourcing and community engagement—all global issues—underpin the future success of our industry. With this in mind, the sustainability program continues to play a key role in our growth strategy. Sustainable sourcing of raw materials is one of the five pillars of Givaudan's sustainability program.

Price Volatility and Cost of Ingredients

Rising ingredient prices was an additional challenge in 2011. Although we have little control over input cost fluctuations, we can control our response to these changes. In 2011, Givaudan successfully implemented price increases in collaboration with its customers to compensate for the increases in input costs and implemented initiatives aimed at sound supplier partnerships and effective stock management.

The greater price volatility for key input materials highlights the importance of expanding sustainable sourcing practices in the future. Our fragrance division and the flavor division have programs in place for a number of key natural resources and will continue to develop ways of addressing this challenge.

Acquisitions: Consolidation in the Industry

Consolidation has been a trend in the fragrance and flavor industry for a long time. Given the fragmented nature of the flavor industry, acquisitions and further consolidation seem likely in the foreseeable future. In the fragrance industry, recent consolidations have been mainly in small US companies. Givaudan is continuously evaluating possibilities that fit our needs and add value to our offerings.

2013 Drivers

The macroeconomic environment of 2013 will remain very dynamic, with results driven by many of the same factors as in recent years. Givaudan is well-positioned to address these challenges with a range of capabilities, including our strong knowledge of—and footprint in—emerging markets, and through a capacity to innovate which is underpinned by our ongoing investments in global talent and R&D.

We also have a comprehensive health and wellness program that helps flavor customers address the nutritional expectations of consumers, and which helps fragrance customers design products able to affect moods and behaviors.

Our industry-leading investment in science and technology exploration enables us to discover next-generation flavors and fragrances, based on the creativity and experience of flavorists and food scientists in translating innovative concepts to commercial realities. And our fragrance ingredients team has the capacity to bring innovation to fragrance materials.

An overarching and robust sustainability program that encompasses both environmental and socioeconomic aspects of our business provides an essential platform for all our activities.

p&f

2 Firmenich

Firmenich

Geneva
Estimated 2011 sales: ~2,775 million CHF/$2,956.7 million (accounting period: July 1 to June 30)
Estimated market share: 13.6%
CEO and Director: Patrick Firmenich

Firmenich has made a number of key investments in the last year, reflecting its focus on a number of growth pillars, particularly developing markets and health and wellness.

The company has begun construction of a new flavor production facility in the Karawang International Industrial City, near Jakarta, Indonesia. The facility, which will be dedicated to the production of Firmenich's Durarome encapsulation technology, is expected to be fully operational by the first quarter of 2013 and represents an investment of $25 million.

The new production facility supports the company's global strategy to increase its operations in the growth markets of Southeast Asia. Through this expanded local presence, Firmenich aims to advance its science further to meet the needs of both the Indonesian domestic market and of the rest of Southeast Asia.

Meanwhile, in a bid to increase its presence in West Africa, Firmenich has entered into a five-year deal with Yaba College of Technology (Yabatech) in Lagos, Nigeria. Through the partnership, Firmenich will build a flavor laboratory at Yabatech and give three students, in their final year, scholarships covering tuition and expenses.

Patrick Firmenich

"The partnership with Yaba College of Technology demonstrates our commitment to developing a direct presence in Nigeria to ensure an understanding of consumers' taste, and be closer to local food and beverage manufacturers," said Emmanuel Frenck, Firmenich's vice president, Sub-Saharan Africa. "Our close partnership with and presence within this prestigious institution offers great potential to capture ideas and create technical solutions for our local customers through the expertise of our Yaba Food Technology partners."

Finally, Firmenich has extended its research and development funding for Senomyx's sweet taste program through July 2013. Sucrose enhancer S6973 and sucralose enhancer S2383 are two products of the program. Both have GRAS status and are expected to be more widely marketed this year. The company is anticipating GRAS status for sucrose enhancer S9632 this year. Firmenich has also selected a new cooling agent, S5031, for development.

Aldo Uva

First Person: Aldo Uva President, Flavor Division Firmenich SA

The flavor business' key drivers are naturals and the improvement of consumer health by delivering the same flavor with lower calories, lower sugar and lower fat, says Aldo Uva, president of Firmenich's flavor division. Also crucial is innovation in terms of creating new tonalities, which can come from regional inspirations, chefs, nature, children, etc., to give consumers new taste experiences, for example chocolate with bacon or figs.

To deliver innovation to the market requires proactive organizations, says Uva, "The industry is going from a reactive response mode in answering briefs to proposing new opportunities to customers. The critical factor is to drive innovation faster to the market." This innovation, he says, is driven by a need for differentiating products and services that offer uniqueness, for instance with taste modulation. He adds that raw material costs, particularly with agricultural commodities such as mint and citrus, are having an impact on the industry as a whole. "There are cyclical ups and downs," says Uva, "and in the future, we see an increase in some of the key raw material prices offset with more efficient performance from an application point of view." He continues, "It's clear that the higher cost of raw materials combined with the high competitiveness of the finished products in the marketplace will command much more efficiency." When it comes to partnerships, Uva says, it is crucial to ensure relationships bring access to key segments. "We are always looking for a good fit with our strategy and seek good potential targets," he says. "Our innovation partnerships with cutting-edge start-ups and innovation leaders are a good example. It's a fact nowadays that in order to be competitive you need an economy of a scale, the right critical mass in innovation and manufacturing to be leaders." Looking to the future, Uva believes successful industry players will use cost controls to keep the cost base low and flexible, while benefitting consumers by bringing innovations to market, including taste modulation. p&f

3 IFF

New York
Estimated 2011 sales: $2,788.0 million
Estimated market share: 12.8%
Chairman and CEO: Douglas Tough

IFF CEO Douglas Tough attending the recent opening of the company's new Delhi-based flavor creative, technical, sensory and sales site

"The ability to achieve our long-term financial targets for the second consecutive year demonstrates the team's aptitude for successfully executing our strategy and navigating through a challenging operating environment," said IFF chairman and CEO Doug Tough. "At the beginning of 2011, we expressed optimism that IFF would continue to perform well despite ongoing macroeconomic challenges and unprecedented raw material cost increases. Thanks to the focus and dedication of the organization, we delivered progress in several key areas. We continued to leverage our geographic reach to capture the growth potential of the emerging markets, to strengthen our innovation platform to deliver differentiating products, and to maximize our portfolio to improve the underperforming areas of our business."

In the past year the company has reorganized its functional fragrances group to align with the global category approach used for fine fragrance and beauty care and for fragrance ingredients. The company also moved a portion of its functional fragrance resources from the developed markets to the emerging markets, increasing emphasis on its Singapore and Mexico creative centers.

IFF also launched a scientific advisory board focused on innovation. The five scientists who make up the new board were chosen for their expertise in key R&D areas the company is targeting per its global strategic review.

Investments in Facilities and Biotech

The company has opened a new facility in Delhi, India, to house creative, technical, sensory and sales professionals for the company's flavors business unit. The facility will service prepared foods, sweets, beverage and dairy product customers serving the Indian market and follows the opening of a new creative center in Shanghai, an upgrade to the creative center in Mumbai, and the groundbreaking of two new manufacturing plants in Asia—a flavors production facility in Guangzhou and a liquid flavors and fragrances compounding site in Singapore. The company also recently opened a new facility in Dubai and expanded CapLock capacity in its Haverhill, United Kingdom plant.

That expansion of the CapLock flavor encapsulation system production line in the Haverhill European Center of Excellence for Flavor Delivery Systems and Encapsulation helped the company build on its prior strategic investments in this technology, which totals approximately $10 million.

Elsewhere, the company opened a flavor and fragrance facility in Dubai, which houses creative and applications labs for the company, as well as sales and marketing offices. The facility—located in DuBiotech, the Dubai Biotechnology and Research Park—supports all categories of flavor and fragrance applications for the Middle

IFF's *new flavor and fragrance facility in Dubai*

Eastern market. The facility will also leverage its global capabilities for its fragrance customers in the region, supporting continued fragrance growth in the Middle East.

Finally, the company expanded its flavor ingredient collaboration with sustainable biotech firm Evolva Holding SA. Under the four-year agreement, IFF will give Evolva an upfront payment, monthly research fees and royalties; Evolva will focus on pathway discovery and yield stages of the program, up through the scale-up and manufacturing phases.

Flavor Highlights

In developed markets, IFF's flavor division experienced a boost from health and wellness solutions. Growth was strongest in beverage and dairy. Overall performance was driven by new business wins and increased volumes with existing customers. In North America, and Europe, Africa and the Middle East (EAME), double-digit increases in both savory and beverage were the primary contributors of growth. Results in Greater Asia were strong, led by double-digit growth in beverage, confectionery and dairy. In Latin America, solid growth was achieved as confectionery and dairy each grew double digits.

Fragrance Highlights

Emerging market fragrance sales have been offset by lower sales in developed markets. "In fine fragrance and beauty care, results were pressured, despite strong performances in hair care and toiletries, as fine fragrance volumes declined," according to the company. Fine fragrance and beauty care were particularly hindered by volume declines. Meanwhile, functional fragrance results were strong as new business wins and price increases drove growth across all categories. Fragrance ingredients were impacted by price increases, which had a negative effect on volume.

Hernan Vaisman

First Person: Hernan Vaisman, Group President, Flavors

P&F: *What have been the main drivers of the businesses over the past year?*

Vaisman: It depends on your region of focus in the world. If you are talking about developed markets, like North America and Western Europe, health and wellness is the main driver of the flavors business. The successful company will find the sweet spot of innovative solutions and excellent creativity to find the right flavor for the market. In the developing markets, the drivers tend to be authentic flavors that deliver on a brand's promise at a price point that is appropriate for the target consumers.

P&F: *How have ingredient costs impacted the business and results? Do you see prices stabilizing any time soon?*

Vaisman: Ingredient costs have strongly impacted flavors, albeit to a slightly lesser degree than the fragrances business. On occasion, raw materials that get priced out of the market will present opportunities for the flavors industry, whether in the form of creating extenders or replacements through either natural or synthetic pathways. Our customers tend to see us as partners in their success, and we take that relationship seriously. So during times of raw material price volatility, we seek solutions that will help alleviate our customers' concerns and help support stable pricing for consumers.

As to the question of any near-term stabilization of raw material prices—that's nearly impossible to predict. So many factors can influence the prices of raw materials, including weather events, political situations and new trends.

P&F: *A number of companies have made some acquisitions in the past year. Do you foresee further moves in this area? How is consolidation impacting your business?*

Vaisman: IFF always looks for opportunities in regard to acquisitions, but we are interested only in those that would make sense for us. For example, we might look at an acquisition where the opportunity would lead to added capabilities, technologies or a complementary geographic footprint. Strategically, this would allow for sustainable organic growth that would make such a move attractive.

P&F: *Finally, what do you think will be the main drivers for 2013 results in F&F?*

Vaisman: We foresee continued focus on health and wellness, certainly in the developed markets, but also a greater focus on healthier products in the emerging markets. We continue to invest in the technologies that make healthier, great-tasting products possible and we leverage our extensive local knowledge—in virtually any region of the world—to ensure that our flavor solutions are market-relevant.

In addition to the macro trend of health and wellness, we see the growth of the emerging markets playing a key role in driving results in 2013. The significant shifts in demographics in many of the emerging markets are giving considerable buying power to people who previously had limited disposable income. The growing middle class in these areas want the same as working families and young urban dwellers around the world—convenient foods and beverages that taste great. Our customers know this and we are making sure we are properly positioned to support them.

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4 Symrise

Holzminden, Germany
2011 sales: €1,583.6 million/$2,052.2 million
Estimated market share: 9.4%
CEO: Heinz-Jürgen Bertram

Investments and Acquisitions

Symrise recently unveiled its new research building, located at its headquarters in Holzminden, Germany. The company intends to pool all its research activities there starting in October 2012. The new building is a part of the company's current €120 million investment program, which foresees investments through 2016. Approximately €10 million will be spent on the first phase of the new research center, which offers a total of 2,000 square meters for researching new ingredients and developing sustainable and efficient technologies. According to the company, the complex will boost an interdisciplinary exchange between the Scent & Care and Flavor & Nutrition businesses.

Meanwhile, the company has doubled its menthol production capacities. With demand increasing both in industrialized nations and emerging markets, the company has invested €16 million in its headquarters in Holzminden. The company is working closely with its Leverkusen-based supplier Lanxess, which is also expanding its capacities. Symrise is also investing in its South Carolina facility in order to process greater volume flows around the world.

The company has also increased its focus on emerging markets and rapidly growing market segments with two acquisitions and a strategic partnership. The company purchased the Brazilian activities of fragrance manufacturer Belmay and transferred these activities to its own site. Symrise's first quarter 2012 reflected a 15% sales increase in Latin American scent and care, driven in part because of its Belmay acquisition. South America is one of the most important sales regions for the company because of its dynamic economic development. Moving ahead, Symrise plans to pool all developmental activities at a new center of expertise in Cotia, and production at the company's Sorocaba site will also be expanded. With the acquisition of Belmay's Brazilian activities, Symrise is expanding its existing offer of products in the application areas of fine fragrances, hair care and personal care. This transaction includes Belmay's existing Brazilian customer portfolio and the company's know-how, as well as the takeover of its supplier contracts.

Symrise is also strengthening its growing natural ingredients business with its acquisition of the US manufacturer Trilogy Fragrances. As natural products are increasingly in demand, particularly in developed nations, Trilogy allows Symrise to expand its position in the natural fragrances segment. The product and customer portfolio from Trilogy is a complement to Symrise's portfolio, rounding out its range of offers. The transaction also contributes to the expansion of the company's presence in North America and includes a long-term supplier agreement between Symrise and Trilogy's previous parent group, TPR Holdings. With this agreement, Symrise secures preferential supplier rights along TPR's entire product portfolio including fine fragrances and personal and oral care, as well as functional ingredients.

Finally, the company has entered into a strategic partnership with the Swedish biotech firm Indevex. The partnership has already strengthened Flavor & Nutrition division results, according to the company. Through this partnership, Symrise aims to strengthen its consumer health division, which was founded in 2009. Indevex produces a patented nutrient complex and markets this primarily through a licensing model. Symrise and Indevex have also agreed to develop new product concepts through joint research and development. Furthermore, Symrise has secured access to a Scandinavian biotech network with existing product partnerships. Symrise is assuming a minority stake and will be represented on Indevex's board.

Heinz-Jürgen Bertram, chief executive officer, at the opening of the company's expanded menthol production site

First Person: Heinz-Jürgen Bertram

Soaring raw material prices and volatility, the nervousness of the market in general, and resulting margin pressure and price increase institutions have been the key forces shaping the industry, according to Symrise CEO Heinz-Jürgen Bertram. "They will also be the drivers for this year and the years to come," he adds. "Our answer to these challenges works well. We have put in place a strategy of pillars of growth—continuing to win business with global customers, being well represented in dynamic emerging market segments which now comprise 46% of the business and continuous innovation."

Bertram continues, "If we talk about margin pressure it's about continuous improvement in efficiencies." He adds that the company's profile differs from its competitors because the flavor business is paired with nutrition and consumer health, while the scent business is paired with care, providing it with different opportunities.

"We do not see relief on the raw material front," says Bertram. "We do not expect them to continue to rise as fast as they have in the past. They may come down in some areas and go up in other areas." But the company is only moderately vulnerable due to its sourcing of about 10,000 raw materials. On the other side, Bertram highlights the company's recent backward integration of menthol and onion oil—in both cases, the company brought production in-house. At the same time, he says, Symrise has established its own vanilla production operation in Madagascar. "Raw material prices will remain a challenge for everyone," he concludes.

> We are not making acquisitions for market share or business size; we are interested in acquisitions that allow us to round out our portfolio.

As for industry consolidation, Bertram says, "We have been actively participating in acquisitions. If it makes sense we do acquisitions and we constantly screen the markets for appropriate candidates. We are not making acquisitions for market share or business size; we are interested in acquisitions that allow us to round out our portfolio."

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5 Takasago

TAKASAGO

Tokyo

2011 sales: ¥113,676 million/$1,474.1 million (accounting period: April 1 to March 31)
Estimated 2011 market share: 6.8%
President and CEO: Ritaro Igaki

Investments in Developing and Mature Markets

In the past year Takasago International (Singapore) Pte. Ltd. invested $10 million in a new manufacturing and research facility in Chennai, Tamil Nadu, India. The new facility, which is proposed to start construction in the second quarter of 2013 and to begin operations in the first quarter of 2014, is part of Takasago's development of key creation, application, sensory, R&D and manufacturing capabilities for new flavors and fragrances customized for the Asia-Pacific region. When fully operational, the facility will become the headquarters for all of Takasago's research, manufacturing and sales operations in India.

Meanwhile, the Takasago Americas division has announced the opening of a culinary center in Rockleigh, New Jersey. Staffed with a team of savory professionals, the culinary center represents an expansion of the company's savory laboratories, bringing together the scientific expertise of technical professionals with the creativity and experience of chefs. The Takasago Culinary Center will have the capability to duplicate techniques and thermal processing conditions employed by large-scale food manufacturers. The center's team will also be able to replicate every taste and aroma nuance using analytical, sensory, savory chefs and flavorists, replicating the complex aromas and taste of processed foods. Finally, the company has obtained global ISO 14001 certification (certification number JP11/071135) for its 17 registered sites. Meeting the requirements for these environmental safety standards required Takasago to set a target for "phase I" of its medium- to long-term EHS strategy, the EHS 100 Plan, which involves establishing "an overarching framework for environmental management underpinned by an environmental management system throughout the global Takasago Group, focusing on production systems."

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6 Mane

Le Bar-sur-Loup, France
2011 sales: €569.5 million/$738.0 million
Estimated market share: 3.4%
President: Jean Mane

Recently, Mane Ibérica established a new space to serve the Spanish market, representing just the latest investment by the company around the world.

In the past year, Mane (Shanghai) Flavors and Fragrances Co., Ltd. broke ground on the second phase of its Baoshan Industrial Park facility expansion project. Rapid growth in the country had led it to reach maximum production capacity three years after its initial construction was completed. The second phase construction encompasses a total area of 13,030 square meters and is estimated to be completed in 2013. The plant will deploy international production lines, while the R&D and application laboratories will be expanded. A new sensory and consumer research center will be established to serve the company's Chinese clients.

Meanwhile, the company officially inaugurated its new R&D center in the United Kingdom, in Derby's Pride Park, which is dedicated to flavor development. The site includes chefs and food technologists working on flavor sensation design. The site also includes application laboratories and kitchens. The new center complements the recently remodeled Haywards Heath, West Sussex-based fragrance R&D center.

Jean Mane

First Person: Jean Mane

"For the third year in a row, Mane has posted double-digit growth figures, enabling the group to publish record sales for 2011 both in euros and in US dollars, and confirming its position as one of the growth leaders in the fragrance and flavor industry," notes Jean Mane, president of Mane. "[This year] is already a record year in terms of investments in production facilities in all three regions."

P&F: *What have been the main drivers of the flavor and fragrance businesses over the past year, respectively?*

Jean Mane: Both the flavor and the fragrance businesses have been driven, over the past year, by a demand for products that allow us to monitor or limit the sharp increase in ingredients and raw materials costs which were initiated in 2010.

P&F: *How have ingredient costs impacted the business and results? Do you see prices stabilizing any time soon?*

Jean Mane: After the exponential increase in ingredients pricing, we are hoping for a positive evolution over the course of 2012. Some large natural commodities have already shown signs that their prices will be decreasing some more during the year, though it is unlikely that they will go back to pre-speculation price levels. On the other hand, the price curves of aroma chemicals, which have not yet shown visible signs of decrease, should follow a downward curb during the second half of the year.

P&F: *A number of companies have made some acquisitions in the last year. Do you foresee further moves in this area? How is consolidation impacting your business?*

Jean Mane: Further merger and acquisition operations are to be expected. As consolidation progresses, it will undoubtedly bring about some major changes in the industry's competitive landscape while the price war which is waging will become increasingly acute. Although Mane's top line growth figures have been achieved organically over the past years by leveraging new technologies and fostering creativity, it does not exclude the possibility to conduct acquisition operations should opportunities that match its product or market strategy arise.

P&F: *Finally, what do you think will be the main drivers for 2013 results in F&F?*

Jean Mane: Depending on the evolution of raw material prices and given the international economic outlook of the coming months, we expect little increase of our activities in mature markets such as Europe while progression will come, once again, from dynamic and fast-growing markets such as Asia.

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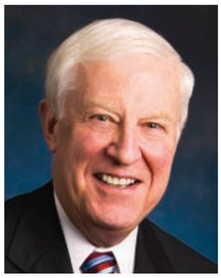
7 Sensient

2011 sales: ~$619.7 million***
Estimated market share: 2.8%
Chairman and CEO: Kenneth Manning; Flavors & Fragrances Group President: Jim McCarthy

"The company performed exceptionally well in 2011," said Kenneth Manning, chairman, president and CEO of Sensient Technologies Corp., announcing the company's annual results. "We achieved record revenue and earnings for the second consecutive year, made substantial investments in our operations, reduced debt and increased the dividend to shareholders. We continue to see opportunities for growth and I am optimistic about the company's future."

In the past year, Sensient has begun the next phase of a series of investments to improve the infrastructure of its UK flavor production facilities. The $6.4 million investment will help improve efficiencies for the production of its Sensient Natural Origins botanical extracts at its Bletchley, United Kingdon, location.

The investment is part of a multiphase capital plan, expected to total more than $20 million, which will improve facilities and production areas of existing sites in the United Kingdom. Future improvements include upgrades to existing laboratories and offices, as well as process improvements to flavor production facilities.



Kenneth Manning

Sensient Flavors also began operations at its pilot plant in Bremen, Germany. The facility produces emulsions, compounds, fruit preparations and beverages, and the facility's development process was created to work in close collaboration with customers and offer trial runs that enable the company to optimize production processes.

Finally, the company announced the opening of a new color and flavor facility in Jundiaí, São Paulo, Brazil. The location will include a factory, as well as an application technology center, R&D laboratories for colors and flavors, a quality control laboratory, a warehouse and offices.

With this expansion, Sensient Technologies Brazil, a business unit of Sensient Technologies Corp., boosted its presence in flavors in the Brazilian market, improving flexibility and local production capability for area manufacturers, as well as improved lead times. The new location will also allow Sensient Technologies Brazil to expand its services in sales and technical support with research, development and applications related to flavors.

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*** Estimated: as in previous years, sales of dehydrated products such as vegetables and garlic have been removed from the results as they are not conventionally considered flavors or fragrances. In 2011 Leffingwell estimated this removed category as 29% of sales.

8 T. Hasegawa

T. HASEGAWA flavors & fragrances

Tokyo
2011 sales: ¥44,246 million/$573.8 million (accounting period: September 1 to August 31)
Estimated market share: 2.6%
President and CEO: Tokujiro Hasegawa

Tokujiro Hasegawa

T. Hasegawa derived 12.8% of sales from fragrances and 87.2% from flavors in 2011, according to the company. The company's flavor activities break down into the following categories:

- Seasonings 7%
- Soft drinks 39%
- Instant noodles 6%
- Confectionery 14%
- Dairy 25%

Moving forward, T. Hasegawa is focused on a return to growth via new major customer wins and new local customers, while also improving production efficiency. These efficiencies will come via a relocation of the Fukaya and Itakura plants and a reduction in production lead time. Following the accomplishment of key investment projects, the company will reinvest in its existing infrastructure.

Asia and Domestic Outlook

T. Hasegawa estimates the regional flavor and fragrance market to be approximately ¥500 billion, with a flavor to fragrance sales ratio of 8:2, versus 5:5 in the global marketplace. The company has noted that it is facing growing competition in Asia, particularly the maturing domestic marketplace. As a result, the company will focus on high value-added compounded flavors and fragrances, and establish an R&D system to more proactively address customer requests (microbial organisms, antioxidants and other functional ingredients, aroma evaluation, etc.). To compete in Japan, in which the company believes it holds the largest market share, T. Hasegawa is looking to more closely align R&D and sales; increase its presence in the alcoholic beverage and health food categories; formulate food-replacement flavors for dairy, fruit juice and vegetables, and animal products; and as previously mentioned, streamline production. It will also pursue a new QC system.

Overseas Outlook

T. Hasegawa's overseas sales are expected to comprise 24.2% of total results by fiscal 2014, driven by growth at the company's Chinese, Thai and US subsidiaries. The company estimates the value of the Europe, Middle East market size at ¥700 billion; North America, ¥500 billion; and South America, ¥100 billion.

In 2011, the company noted a slowdown of sales in China, though a return to double-digit growth is expected this year. As affluence increases, so too does flavor and fragrance consumption. The soft drink market has been particularly high-growth, according to the company, defined by the leading categories of carbonated drinks, fruit juices, tea beverages and milk beverages.

T. Hasegawa has reported a recovery in the US market. Results were boosted by sales of new products.

To continue growth overseas, T. Hasegawa is focused on serving multinationals (domestic and non-domestic) in China, servicing savory flavor customers in the United States, encouraging shared technical expertise among its subsidiaries, building sales in Thailand, adding sales and R&D personnel in China, improving its Southeast Asian supply chain system, establishing an efficient supply chain system for the Southeast Asian market, and bringing in new key staff to support US activities.

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9 Frutarom

Haifa, Israel
2011 sales: $518.4 million
Estimated market share: 2.4%
President and CEO: Ori Yehudai

Global Growth Amid Ongoing Acquisitions

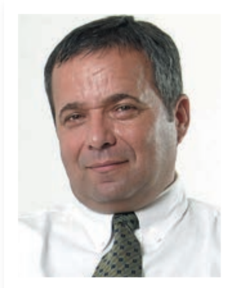
Continuing its acquisition track, Frutarom has made a number of key purchases in the past year. The company acquired Savoury Flavours (Holding) Ltd. (SFL; Manningtree, England) and its subsidiaries for about $5.88 million. SFL's activities included the production of savory flavors, seasoning compounds, marinades and sauces, primarily for the snacks and convenience foods sectors, including private labels. SFL's production site is located close to that of British East Anglian Food Ingredients Ltd., which was acquired in January 2011.

Frutarom Industries Ltd. (Haifa) also acquired Etol d.d. (Sofia Vas, Slovenia). The company develops, manufactures and markets flavors, particularly natural flavor products for the food and beverage industry. The company develops fruit-based flavors and food systems, specializing in local fruits of the region. This growing company is expected to help Frutarom's expansion in Eastern and Central Europe, a boon to the company that saw a 15% sales increase in 2011 for a record $518.4 million.

Etol's products are sold in more than 46 countries outside of Slovenia, including Russia, Poland, the Ukraine, Turkey, Croatia, Serbia, Belarus, Hungary, Slovakia, Macedonia, the Czech Republic, Kazakhstan and other emerging markets.

Enhancing its Latin American presence, Frutarom purchased Mylner Indústria E Comércio Ltda, a Brazilian flavor company, for approximately $15.7 million. Mylner develops, manufactures and markets flavor solutions, focusing mainly on sweet flavors for beverages and baked goods, and natural flavor products. The Brazilian company has a production and marketing site near São Paulo, including land for future expansion, and it employs some 70 workers to serve food manufacturer customers, which are primarily mainly in Brazil and other developing Latin American countries.

Mylner has shown good growth rates over the past few years, and its sales turnover has increased over the past four years by 43%, from revenues of $6.8 million in 2007 to revenues of $11.4 million in 2011. Also, over the past year, Mylner's sales turnover grew by 8%.



Ori Yehudai

The acquisition is expected to significantly increase Frutarom's customer base, product portfolio and the scope of its sales in the flavors market, while deepening its operations and market share in the growing Brazilian market and in Latin American markets. Frutarom intends to utilize Mylner's production, development, sales and management capacities as a base for the development of its business in this important developing region.

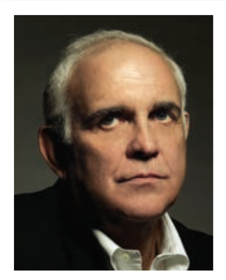
Reflecting on recent acquisitions, Ori Yehudai, president and CEO of Frutarom, has said, "[W]e continued the successful implementation of our rapid growth strategy, combining internal growth with acquisitions, again recording quarterly highs for the company. After seven acquisitions in 2007, and three in 2009, all of which have been successfully integrated with Frutarom's global activities and contribute to both a growth in sales and improved margins, we continued to implement strategic acquisitions and completed five acquisitions in 2011 and an additional three at the beginning of 2012.

"The scope in revenues from the last eight acquisitions, based on 2010 figures, stood at $145 million. The acquisitions, whose values are yet to be fully reflected in the outcomes of our operations, are in advanced stages of integration and support our expanding global reach. These acquisitions have deepened our presence in developed markets as well as in emerging markets where growth rates are higher than the global average, and expanded our customer base throughout the world as well as the unique and diverse product portfolio we can offer our customers.

"In the upcoming months we will continue to integrate sites and activities, to utilize the many streamlining opportunities and to realize the substantial cross-selling possibilities created by the acquisitions. At the same time we will continue to identify opportunities for additional strategic acquisitions in attractive target markets and in emerging countries."

10 Robertet

Grasse, France
2011 sales: €373.28 million/$483.7 million
Estimated market share: 2.2%
Chairman and CEO: Philippe Maubert


Philippe Maubert

In the past year, Robertet opened a new fragrance compounding facility in Plan-de-Grasse, France, to support organic growth in the developed markets. The 12,000-square-meter facility represented a €27 million investment for the company, which unites the production, logistics and quality control operations of Charabot and Robertet and will produce 4,000–6,000 tons of fragrance annually, with 90% automation.

Recently Christophe Maubert, president of the fragrance division, spoke to *P&F* magazine about the factors affecting the overall business and what's ahead.


Robertet's new fragrance compounding site in France

First Person: Christophe Maubert, President, Fragrance Division, Robertet

"In recent years we have observed a significant increase of requests for our natural products," says Maubert. "It's an overall trend that's positively impacting both our fragrance and flavor businesses. There is an expectation from both our clients and the end consumer to have natural products."In addition, he says, consumers are looking for more information about products. "The final consumer is much more educated now and wants to have more detail," says Maubert. "They don't just want an apple, they want to know what kind of apple it is and where it comes from." Of the fragrance business, he says, "The last few years have been very bizarre because we saw some countries declining due to recessionary pressures while other countries were showing accelerated growth as emerging markets. On top of that we have all the pricing issues. Today the market is very erratic and it's difficult to pass price increases to customers." Maubert believes the company enjoyed a strong performance in the fragrance business by winning market share in the developed markets of Western Europe, rather than benefiting from overall market growth. Results were bolstered by major wins in fine fragrance and strength in the US household fragrance category. "We are confident in the future of our company," says Maubert. "We have made strategic investments in state-of-the-art production facilities in both Grasse, France and the United States to demonstrate our commitment to growth in these mature markets. We don't believe that future growth will only be in the emerging markets of India, Brazil and China. Results will vary country to country. Today, we have to understand that there are real challenges associated with creating growth in emerging markets, due to the complexity that comes from markets that are changing as rapidly as China and Brazil. We have to be balanced in our approach and remain very active in mature markets as we seek to uncover new opportunities." At the same time, he says, while products for emerging markets have traditionally been manufactured in mature markets, increasingly those products will be developed within the markets for which they are intended. "Price stabilization will vary country to country," says Maubert of the future. "Mature markets will stabilize, while emerging markets will have volatility. This has impacted our industry, especially last year. Everybody was expecting with an overall slowdown in consumption that this would go back to a decrease. Overall in the marketplace, I think we are still seeing the trend of globalization. Every company wants to be more profitable, better organized and more strategic in their endeavors around the world. I don't see any signal that this process is changing. But, specific to the flavor and fragrance industry, it's slightly different. If you look at the top 10 or 15 companies that comprise 90% of the market, you cannot extend the globalization trend to those companies. When you look at the overall evolution of our industry, the smaller companies like Robertet have done significantly better than others. In both flavors and fragrances we are producing tailor-made products, so it's very difficult to say we are going to globalize an industry that is more local in nature." "

Meanwhile, he says, "Regulations really impact the product in terms of creativity and sourcing ingredients, but they also have a big effect on pricing. Twenty years ago we had a very limited regulatory department. Today it has become the largest group in terms of numbers in our industry. We are going to have more regulatory [staff] than perfumers and flavorists. It's a big boost to costs."

These costs will eventually find their way to the finished products, which will require that suppliers and their customers absorb some of the costs. Maubert adds that one of the deleterious effects of ingredient price increases is that R&D investments have been impacted. This disinvestment, he argues, harms the pursuit of new naturals and molecules, which in turn threatens to commoditize those companies that don't sufficiently pursue differentiation.

"The risk is to become, at the global level, a commodity business," Maubert concludes.

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F&F Movers

Since the publication of the "2011 F&F Leaderboard," two companies—Wild Flavors and Kerry Ingredients & Flavours—have made significant acquisitions that have pushed them further into the top tier of the industry. Based on acquisition figures, it is likely that Kerry will appear on the "2013 F&F Leaderboard," with Wild Flavors not far behind.

In recognition of these companies' notable growth, *P&F* magazine offers the following brief profiles.

Wild Flavors
Erlanger, Kentucky/Zug, Switzerland
Owner: Hans-Peter Wild
CEO and President: Michael Ponder

Recently, Wild Flavors announced it had acquired certain assets of A.M. Todd Ingredients and Flavors. Included in the transaction was A.M. Todd's natural mint business, and its science and technologies for the development and production of organic flavors, natural ingredients and plant extracts. With the addition of these products from A.M. Todd, Wild aims to enhance its growth with new business lines for its customer base and expand into new markets.

"With the addition of A.M. Todd's product portfolio, Wild will be able to combine the advantages of natural mint oils with its specialized technologies in health ingredients, colors, taste modification and flavors to provide innovative and natural solutions to existing and new customer groups," Michael Ponder, CEO of Wild Flavors, said at the time.

Meanwhile, Wild Flavors acquired Cargill's global juice cold blends and compounds business, boosting its natural ingredients palette. The acquisition added more than $200 million in additional annual sales and three ocean-access tank farms in Asia, Europe and North America.

> "Every company has the same concern about supply chain and the cost of ingredients."
> —Garry Raab

Cargill's juice cold blends and compounds business provides customized juice blends and compounds for high-fruit content beverages and juice concentrates.

"This acquisition is a key step to continually grow a differentiated and integrated supply chain for juices to benefit our customers," Ponder said at the time. "Cargill's business will provide improved raw material access while strengthening our existing juice capabilities."

Meanwhile, focusing on “delivering a continual pipeline of robust, innovative concepts to the food and beverage markets,” Wild Flavors has created a global research and innovation group based in Zug, Switzerland. According to the company, this will be a cross-functional, cross-regional team comprised of highly technical and experienced research personnel and trained chemists, incorporating flavor, color, ingredient and research expertise.

First Person: Garry Raab, Vice President Global Flavor Research and Innovation, Wild Flavors

“The main drivers are the emerging market growth in the artificial flavor arena and continued demand for natural products in the more [mature] markets,” says Raab. He adds that while price pressures are always a factor, emerging market consumers are slowly adapting more natural and sophisticated flavors with an increasingly healthy positioning.

“Globally, health and wellness is pushing the business toward low sugar, low calorie, low sodium [offerings] with the same profile as [conventional] flavors,” Raab adds. Sodium concerns, like other health and wellness trends, are moving into more and more markets, he continues.

“The underlying two-prong effect is the expectation of the consumer for a good tasting premium brand whether it’s a standard profile or more exotic, as well as a varietal curiosity,” says Raab “Consumers are looking for a Red Delicious profile or a Fuji Apple. They are much more specific, much more detailed.”

Of industry challenges, Raab notes, “Every company has the same concern about supply chain and the cost of ingredients.” Global sourcing initiatives help stabilize costs, he says, though the cost of labor continues to grow. At the same time, he says, the industry will always face occasional crises due to weather-related disasters, such as those that have affected vanilla or grapefruit.

Looking ahead, Raab says, “The industry is changing. There is more consolidation on the horizon, which may be due to cost pressures and vertical integration—companies acquiring vendors or a vendor acquiring an ingredients company or a value-added company.

“Two acquisitions in the past year gave us a presence in mint and aromatic ingredients from A.M. Todd,” says Raab. “Cargill’s juice systems helps to broaden our portfolio and integrate vertically.”

Of technical innovations, he says, “Taste enhancement, sweetness potentiation, bitter blocking and the trigeminal effect will be first and foremost in the industry.” In addition, he says, products with fewer calories and full taste boosted by products with stevia and off-note maskers will be significant. While artificial flavors haven’t vanished, natural flavors will continue to increase around the globe, Raab says. At the same time, customer-tailored products such as dilutable syrups will please consumers of the future.

Kerry Ingredients & Flavours
Beloit, Wisconsin
President and CEO (Kerry Ingredients & Flavours): Gerry Behan

“Kerry delivered good profitable growth in 2011 despite weak consumer confidence in many markets and significant raw material and input cost inflation,” said Kerry Group CEO Stan McCarthy when the company’s results were announced. “The group performed well across developed and developing markets while continuing to build our capabilities and positioning for the future. “

Innovation drove flavor results via consumer demands for “free-from” foods, reduced calorie, reduced salt, reduced fat, higher fiber, natural flavors and ingredients, enhanced nutritional and dietary products, in addition to continuing trends toward more convenient, cost-effective solutions, healthy snacking options and affordable indulgence, all of which fit well with the company’s range of ingredients, flavors, texture, nutritional and taste solutions.

Boosting results of the flavor and ingredients business was the company’s acquisition of Cargill Flavor Systems, the global flavor business division of Cargill. The acquisition, which was made for $230 million, strengthened Kerry’s capability to provide integrated customer solutions across all food and beverage end-use markets. Cargill Flavor Systems brought with it flavor development and application centers in France, the United Kingdom, South Africa, India, Malaysia, China, the United States, Mexico and Brazil, and a network of sales representative offices in 12 other countries around the world.

According to the company, Kerry’s acquisition of Cargill Flavor Systems has boosted first-quarter 2012 sales, which grew 9.7% year-over-year. The purchase significantly benefited its activities in the beverage sector.

Meanwhile, Kerry Flavours & Ingredients is reportedly closing its Cincinnati and Waukesha sites. The Cincinnati move will eliminate 141 jobs by the end of the year. Production will be consolidated in Wisconsin and New Jersey. The Waukesha, Wisconsin, plant was part of its acquisition of Cargill Flavor Systems and produced flavors used in dairy products.

Kerry also acquired SuCrest, a German ingredient manufacturer focused on bakery, ice cream, confectionary, cereal and snack products. SuCrest, which also featured product development and production facilities in Belarus and a sales office in Moscow, primarily served the European market. This acquisition helped Kerry significantly expand its sweet ingredient and flavor business in the EMEA region. SuCrest reported annual revenue of €50 million in the financial year ended December 31, 2010.

Kerry has also revamped its customer center in Beloit, Wisconsin, to include a new cell science laboratory. Based on its companion site in Almere, The Netherlands, the laboratory will incorporate technologies and media supplementation expertise for Kerry's bio-pharma customers and technology partners.

Kerry is investing more than $10 million in the expansion of the laboratory and this customer center of excellence, which includes a consumer nutrition center, flavor labs and product ideation, and customer collaboration suites. The expansion is expected to be completed shortly and will add nearly 50 new jobs and an additional 30,000 square feet to the existing 260,000-square-foot facility.

Kerry also purchased FlavourCraft, which specializes in the design and manufacture of flavors for meats, soups, sauces, dressings and savory snacks in the South African and Sub-Saharan markets, particularly in Nigeria. The FlavourCraft deal also provides Kerry with a major manufacturing facility in Africa, a 4,000-square-meter factory outside Durban and a customer and application center. Kerry notes that first quarter 2012 growth was boosted by the acquisitions of FlavourCraft and SuCrest.
