Marketing
Right up to date – current sun care trends

Markets
Germany 2013: toiletries + household care markets record a slight increase

Ingredients
Natural cosmetics – traditional actives under the microscope

Production
Can different foaming behaviours be differentiated by automatic foam testers?

VIP of the Month
Dr. Stefan Bänziger of Rahn explains how to make irritating processes more mild and how to support the return of the skin barrier to a normal level

Focus: Sun Care
Mango butter

Fruity, and exotic ...

What has bio-certified mango butter to offer in cosmetics? Maria Kaiser describes the demands to be met in the production of this ingredient and talks about its advantages in use.

It was only in 2013 that mango butter became available as a bio-certified ingredient for cosmetics. It was first developed by All Organic Trading (AOT) in 2011, working with their partners BurkiniNature of Burkina Faso and Nateco, in Germany.

Mango butter in natural cosmetics

Mango butter is so highly prized in its action that it is particularly applicable for regenerative cosmetics. Because medical publications have highlighted the healing properties of mango butter it is of use in products for sensitive skin.

It is often used as a thickener in lip care, colour cosmetics and facial care products.

In moisturising sun protection and after-sun products its cooling action is highly regarded. Mango butter has a more moist and lighter character than other comparable butters, it is more quickly absorbed by the skin, leaving no film. Because it melts at normal body temperature, and is well accepted, it is successfully used for body butters. In addition its nourishing and regenerative actions are ideal for use in the treatment of dry hair. Presented properly to the consumer it awakens positive associations of exotic applications.

Biological compared with conventional mango butter

Mango butter today is a very popular ingredient in cosmetics, and which, in bio-quality, has been well, and transparently, documented as a highly sought-after alternative to the conventional, chemically extracted product.

Because the mango kernel, which has no oil seeds, has a very low fat content conventional mango butter is obtained by a solvent extraction process using hexane. This efficient, but not totally risk-free process, results in a high oil yield which, however, calls for subsequent chemical refinement.

This refinement removes all of the contamination and residues which could have been introduced via the mango juice, caused by an unsuitable drying process whilst in tropical conditions, by transport residues or by using conventional plant production methods etc. It is often used to compensate for errors in processing.

Contrary to this, biological mango butter requires optimum processing right along the value chain in order to meet the required, and/or self-imposed, parameters in the specification. But if residue and contamination cannot find their way into the product then there is no need for their subsequent removal.

Mango kernels of a biological quality thus represent the ideal basis for CO2 extraction, a physical process that is carried out in Germany. This process, that is carried out at low temperatures, was adapted, working together with Nateco, to suit the processing of the mango kernel. CO2 acts as a neutral gas.
and is even anti-oxidative. CO$_2$ extraction, as a very gentle process, is well suited to sensitive speciality oils with a low fat content. Thus the mango butter needs neither post treatment nor refining, and all of the heat sensitive ingredients are retained.

**The multi-talented mango**

In Burkina Faso the mangos are picked at their optimum stage of ripeness and are post-ripened by the processors in order that they can be immediately processed at an absolute perfect ripeness and a full aroma. 300 bio-mango growers have been with the BurkiNature organisation for 10 years. As a by-product there is a surplus of dried mango kernel. Using this basic ingredient of the mango butter there are only four specially selected processing plants where the perfect kernels are picked out. They are immediately gently dried in order to retain all of the positive features for the end product and to avoid any risk of contamination.

**Groups of women** around the city of Bobo-Dioulasso in the South West of Burkina Faso support the farmers, who generally work on subsistence land, by carefully saving the mango kernels and using them to create small works of art. Using the kernel as a new product, which had previously no real use, has created additional work and source of income. Working together like this, the groups of women are able to take part in international trade. This type of organisation is also having a positive impact in stopping the flight to the cities, which was formerly seen as the only escape from poverty.

Although migration to the cities was mainly something done by men, today we can see large numbers of young women and girls who have been obliged to seek a housemaid’s job in the city. Training courses are an important part of the corporate culture in Burkina Faso but in many country areas over 90% of the people cannot read or write.

A literature list and further information on mango butter, as well as a podcast, can be found on the Internet (see Internet panel).