

News Release

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Rambutan Program: BASF launches bioactives from responsible beauty program

- **The Rambutan Program creates a positive impact on Vietnamese rural society answering to the eco-responsible aspiration of today's consumers**
- **BASF and Vietnamese partners have been collaborating since 2015**
- **New bioactives Nephydrat™, Nephoria™ and Rambuvital™ are preservative-free, 100 percent natural origin and COSMOS-approved**

At this year's trade fair in-cosmetics, BASF's Care Creations™ launches three new active ingredients derived from its Rambutan Program, a socially and environmentally responsible supply chain for sustainable bioactives production. Working in close cooperation with partners in Vietnam, BASF sources the ingredients, which are extracted from the rambutan tree (*Nephelium lappaceum*), from the first organically certified rambutan gardens in Vietnam. With its program, BASF creates a positive impact on Vietnamese rural society by upcycling different parts of the tree, other than the fruit, and at the same time offering incomes above the average, ensuring gender equity while guaranteeing safer working conditions and providing health insurance. It also helps manufacturers of hair and skin care products to respond to the growing trend of responsible beauty.

An interdisciplinary innovation platform at BASF focuses exclusively on the extraction of valuable substances from plant material. "Plants are at the heart of our value proposition, and our commitment to further improve our sourcing network is driving our innovation to develop new products from sustainably sourced plants,"

explained Lucilene Veira Nunes, Head of Business Management Beauty Care Solutions Europe. “For the Rambutan Program, we were able to capitalize on the experience we gained in our Argan Program in Southern Morocco, which was started in 2005.”

The Rambutan Sustainable Program for responsible beauty

In 2015, BASF set up the Rambutan Program, which involves a network of local farmers and a dedicated Rambutan team. The team maintains the gardens throughout the year, harvests the fruit, and prepares all raw materials for the extraction of the bioactive ingredients.

In Asia, rambutan – a close relative of lychee tree – is known for its many powers. The tree’s juicy fruits are rich in iron, vitamin C, fibers, and antioxidants, and have long been used to quell dysentery. The rinds contain various compounds with antioxidant properties, and the seeds are known to decrease unwanted fat. The pulp boosts energy and immunity, prevents diseases, and contributes to eliminate free radicals. BASF has found a way to extract the powers of the peel, leaves and seeds for cosmetic products, making sure no part goes to waste.

Nephydrat™ peel extract hydrates the skin

Nephydrat™, an extract from the spiny fruit peel, reinforces the skin’s capacity for water retention and helps to hydrate the skin – a noticeable effect proven in tests with volunteers. The extract fuels keratinocytes with energy and increases phospholipids and long chain ceramide synthesis for an optimal skin barrier function. Nephydrat provides measurable and perceivable benefits of increased skin hydration and a uniform, fresh complexion.

Nephoria™ leaves extract rejuvenates mature skin

The evergreen-leaves extract Nephoria™ helps mature skin to rejuvenate through biological pathways similarly to those of retinol. Through its action on several major biological targets involved in collagens synthesis and elastic fiber network, the leaf extract stimulates both collagen and elastic fibers formation *in vitro*. Nephoria *in vivo* showed increased skin elasticity and reducing wrinkles.

Rambuvital™ seed extract protects scalp and hair

The seed extract Rambuvital™ protects both the scalp and hair follicles against pollution-induced stress. It increases hair follicle vitality and reduces sebum oxidation triggered by exposure to pollutants and UV. The seed extract enhances the cornified scalp's barrier function, contributing to water retention by increasing transglutaminase-1 and loricrin synthesis in keratinocytes. *In vivo*, the scalp was significantly more hydrated within one month and the hair appeared and felt visibly healthier and shinier.

100 percent natural-origin and COSMOS-approved extracts

All three bioactives are preservative-free, 100 percent of natural origin, and COSMOS-approved. They are obtained through a unique extraction and purification process, yielding a product with standardized active matter content. For the seed and leaf extracts, the combination of maltodextrin and spray drying allows to obtain concentrated extracts with a recommended dose of use of only 0.1 percent. The recommended dosage of the liquid peel extract is 2 percent.

About the Care Chemicals division at BASF

The BASF division Care Chemicals offers a broad range of ingredients for personal care, home care, industrial & institutional cleaning, and technical applications. We are a leading global supplier for the cosmetics industry as well as the detergents and cleaners industry, and support our customers with innovative and sustainable products, solutions and concepts. The division's high-performance product portfolio includes surfactants, emulsifiers, polymers, emollients, chelating agents, cosmetic active ingredients and UV filters. We have production and development sites in all regions and are expanding our presence in emerging markets. Further information is available online at www.care-chemicals.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.