

SEQENS Cosmetics, represented by ChemSpec Ltd, Safic-Alcan

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Biomimicry: observing the gorilla behavior to identify active molecules at skin level

PRODUCT/SERVICE BACKGROUND INFORMATION

Daniel Janzen was the first scientist to publish and explain that certain vertebrates might just have acquired knowledge that enabled them to avoid certain toxic herbs and even improve their own health through what they used¹. The repeated observation of curative behaviors in animals has consequently given rise to a new field: zoopharmacognosy².

WHAT IS THE COMPANY INTRODUCING TO THE MARKET/INDUSTRY?

As a basic premise of zoopharmacognosy, animals utilize plant secondary compounds or other non-nutritional substances to medicate themselves. In order to select plants with dermatological effects, behavioral and health monitoring of Gorillas living in the Mamfe region of West Cameroon has been carried out. These observations highlighted the importance of Aframomum melegueta seeds and fruits: by its anti-inflammatory effect, this plant protect the myocardium of the gorillas from inflammation causing fibrocausal myocardiopathy.

HOW WILL THIS NEW PRODUCT/SERVICE IMPACT THE INDUSTRY (BENEFITS)?

In this context, SEQENS Cosmetics has set up a bio-inspired discovery platform for molecules with breakthrough efficiency at cutaneous level: Etho-phytology $^{\text{\tiny{M}}}$.

The study of *Aframomum melegueta* seeds extract highlighted anti-inflammatory properties at skin level:

- Ex vivo: genetic modulation of key mediators involved in inflammation resolution,
- Clinical study: improvement of the skin barrier function and reduction of skin redness.