

## Cosmeceutical Formulation Naga/Pitaya Fruit

### TECHNOLOGY DESCRIPTION

This technology provides a cosmeceutical formulation containing Pitaya plant *Hylocereus polyrhizus* seed extracts comprising polyphenols and/or fatty acid compounds.

### TECHNOLOGY FEATURES

This technology is a powerful anti-oxidant and antioxidant is a compound that responsible to inhibit or delay the free radical reaction on skin which may cause aging. This technology contains polar solvent extracts comprising polyphenol and flavonoids. It is able to nourish skin, hair and nails. Essential fatty acids (EFA) in this product also can control the flow of oils by maintaining the skin's metabolism, and nourish collagen. EFAs can be used to treat acne problem. Normally, patients that having crisis with acne lack of EFAs level such as gamma-linoleic acid in their skin surface lipids.

### ADVANTAGES

- Natural active-based cosmeceuticals
- Plant based Essential Fatty Acids
- Anti-wrinkle and dryness
- Ultra protection against ultra violet radiation (UVA).

### INDUSTRY OVERVIEW

#### Prospect: Cosmeceutical Producers

Increasing consciousness about appearance will drive cosmetics market to be worth around \$650 billion by 2020 with a CAGR of 6.3%. The major product applications of cosmeceuticals are in skin care, hair care, tooth whitening, lip care. The global skincare market had reached a value of USD96.5 billion in 2013. In 2016, skincare segment dominated cosmeceuticals market and occupied the largest portion in the global market. The growing awareness about the benefits of cosmeceutical products drives consumers to switch from regular skincare products to cosmeceutical skincare products. The anti-aging cosmeceutical products segment is one of the major contributors to this segment, in terms of revenue. The cosmeceuticals markets in the U.S, the U.K., France, Germany, Italy, Spain and Japan were worth around \$35 billion collectively in 2013. United States accounted value around \$8 billion in 2013 while Europe accounted for USD5 Billion in 2013. Asia-Pacific Cosmeceuticals market contributes nearly 63.1% to the global market where the major players are Japan and China. Japan contributed the major share and is anticipated to grow at a CAGR of 8.1% during the forecast period, followed by China. The cosmeceuticals market is seeing growth in revenues coming from BRIC countries, Indonesia, Thailand, Vietnam, Malaysia, Singapore, Middle East and Australia. Some of the potential buyers for this cosmeceuticals formulation would be local and international manufacturers such as Procter and Gamble, L'Oreal, Unilever, Beiersdorf, private labels of dermatologists and many others.



**Assoc. Prof. Dr. Siti Salwa Abd Gani**  
Faculty of Science