

Pumpkin

from vegetable to beauty

Pumpkin, *Cucurbita pepo* Linn. (Hindi – *Sitaphal*) is commonly used as a vegetable throughout India. Its seeds are reported to have anthelmintic properties; Milano, Italy based Indena company has obtained an active principle curbilene® from its seeds. The *in vivo* tests have shown that curbilene is a safe and effective cosmetic ingredient for skin. A highly purified extract, curbilene was prepared using a specific extraction technique including CO₂ in supercritical conditions. A marked matting effect on the skin with a significant decrease of cutaneous brilliance even up to 8 hours after application of 2% concentration was observed on 10 volunteers (*Fitoterapia*, 2001, 72, 104).

A good skin soother

Zanthoxylum armatum DC. syn. *Z. alatum* Roxb. (Hindi – *Darmar*) is a shrub or small tree, found in Himalayas and the eastern ghats, in Orissa and Andhra Pradesh.

In Chinese folk medicine, oily extracts of this plant are used to soothe itching and toothache and in Korea a decoction is used as protection against sunburn. To explore its potential as natural soother Indena, an Italian company extracted its oily fraction with CO₂ in supercritical conditions. A mixture of the oily fraction with ethyl alcohol, named zanthalene® 20% solution has been prepared for cosmetic use on skin. It showed immediate soothing action without any side effects. It also preserved the protective function of the skin against external aggression. Thus zanthalene 20% solution is particularly prescribed as after sun, after depilation, after peeling and shaving formulations. It is also generally useful for formulations designed for sensitive skin (*Fitoterapia*, 2001, 72, 105).

Cosmetics

Natural Beauty Products

Jojoba and Aloe

The world over there are traditional and centuries old cosmetics for protecting the skin and hair and for odour-free body using a variety of perfumes. The world has become modern and synthetic cosmetics and perfumes are flooded in the market but plants still provide and serve more than 80% of the beauty ingredients. Considering demand and supply growing these natural beauty herbs can create a lucrative Agri-Business.

Jojoba [*Simmondsia chinensis* (Link) Schneid.] a native plant of USA is grown in Rajasthan on a small scale. About 90 per cent of the Jojoba grown in the United States is exported, mainly to cosmetic companies in France, Switzerland and Japan. An oil is obtained from its leaves which after refining becomes creamy white and this is a superior beauty product. According to cosmeticians it is an excellent moisturizing ingredient similar to that found in human skin [Lee Jill, *AgExporter*, 2001, 13(2), 18].



Aloe (*Aloe vera* Linn.) in the field of cosmetic is not new and secret. Since ancient time it is used in pharmaceuticals as a healing agent as an emollient, antioxidant, antibacterial and antifungal. However its newer applications are to be popularized to take maximum benefit of this beautiful plant for maintaining beauty. The juice of the plant can be drunk as a dietary supplement or its extract can be used as a medical supply and as an ingredient in every thing from sunscreen to products that help heal skin burns after radiation therapy.

Emollients are used as drugs to make the skin look much better, smooth and supple. Basically, emollients are moisturizers; they form a lipid layer on the top of the skin layer. The mucilage of the *Aloe vera* leaves is a mixture of polysaccharides which contains mannose, glucose, xylose, arabinose, galactose and rhamnose. The advantages of using Aloe is that it is absolutely nontoxic and can safely be applied on open wounds and burns [Sacchidanand *et al*, *Indian Med Gaz*, 2001, 34, 320].

