



Noni (*Morinda citrifolia* L.) : A crop for future

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Noni is popularly known as “nuna” or Indian mulberry, being evergreen tree bear fruits Throughout the year. It belongs to family *Rubiaceae*. It is biggest pharmaceutical unit in universe because it has more than 150 nutraceuticals, vitamins, minerals etc. It has various uses in home care products, food products, health support products, fruit drinks, cosmetics etc.

It is an important fruit because of its wide range of therapeutic potentials such as anti-bacterial, anti-viral, anti-tumor, anti-helminthes, analgesic, hypersensitive, anti-inflammatory and immune enhancing effects. The roots are being used to synthesize red dye while leaves, bark and fruits are used to produce facial creams, soaps, toothpaste, lotions, tea powder and various other products.

Uses :

Medicinal properties :

– Its medicinal values are found in all the plant parts like leaves, flowers, roots, bark etc. It can cure AIDS, allergies, asthma, cancers, diabetes, cataracts, depression, acnes, skin problems-eczema etc.

Noni for nutrition and health food supplement : It had been used as a food, drink, medicine, and colourful dye. Vitamins have been reported in the fruit, mainly ascorbic acid (24-158 mg/100 g dry matter) and provitamin A. Phenolic compounds have been found to be the major group of functional micronutrients in noni juice.

Processed noni products :

Noni juice :

Noni juice can be more popularised in the form of following beverages:

- RTS beverage: This is ready to serve noni juice to which sugar is added.
- Squash: It is prepared by increasing TSS of noni juice and diuted before serving.
- Concentrated liquid: It may contain added sugars in such proportions to ensure that when reconstituted according to the directions stated on the label, the reconstituted juice complies with this compositional guideline.
- Flavoured beverage: Some synthetic flavours and

essence can also improve the flavour to acceptable level.

- Fortified beverage: It is noni juice fortified with vitamin supplements and minerals.
- Mixed or blended juice: Noni juice can be mixed with other fruit juices like grape juice, pomegranate juice etc.
- Diet noni juice: It is a low calorie noni juice in which sugar is replaced by adding non-nutritive sweeteners like aspartame, steviocides, saccharine etc.
- Wine: It is an alcoholic beverage prepared from noni juice.

– Herbal drink: This type of drink can be prepared by adding natural herbs or their extract like safflower extract, Roselle extract, aloe vera juice, grape seed extract, camellia extract etc.

Noni Pulp: It can be exploited in prepration of novel foods like:

- Fruit leather bar: Noni pulp can be successfully employed for preparation of leather bar. The pulp can be used alone or mixed with other fruit pulps like apple, mango, papaya and other pulpy fruit for better taste and acceptability.
- Sweet pulp concentrate: It is a novel product of noni fruit pulp where TSS and acidity are adjusted to obtain desired sugar acid ratio and pulp is homogenized.

– Herbal prash: Noni pulp can be mixed with some popular Indian herbs and spices to give a relishing and laxative product “herbal prash”.

– Mixed fruit prash: Noni pulp can be mixed in definite proportion with other fruit pulp like aonla, date fig etc. Along with herbs and spices to prepare mixed fruit pras.

– Puree: It is simiar product to noni sweet pulp concentrate, differing in added ingredients and flow characteristics.

– Jam, Spread, Mixed fruit jam: Noni pulp is rich in pectin hence can be converted to jam, spread and mixed fruit jam like other fruit jam.

– Powder: Noni pulp can be converted to free flowing powder by spray drying or drum drying. Dried noni fruit also yields good quality powder.



– Sauce and Chutney: Added with spices and herbs, noni pulp can be successfully exploited for preparation of sauce and chutney.

– Toffee: A good quality toffee can be prepared by mixing noni pulp and other fruits like apple, jamun, mango, papaya etc.

Noni fruit powder: It can be reconstituted with water and later concentrated or used as base for RTS squash, flavoured beverages, fruit drink, etc. The powder can be used for making capsule, pills and tablets.

Noni leaves: The leaves can be powdered and exploited in preparation of herbal tea and used in capsule, pill and

tablet form.

Conclusion: There are more than 198 noni based products are available in the market now which are being used and still there are possibilities to exploit its potential in the fields of nutraceuticals, pharmaceuticals and cosmoceuticals. No doubt that is a potential crop for the farmers to get high profit with assured market and a potential raw material for making lot of value added products. The consumers will have lot of food supplement nutritive products made of noni.

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