

Adding Sweetness to The Life of Diabetics



CSIR-Institute of Himalayan Bioresource Technology Palampur-176061 (Himachal Pradesh)

Excessive intake of cane sugar leads to serious health complications like diabetes and obesity. CSIR-IHBT took the initiative to address this aggravating health issue by introduction of stevia (*Stevia rebaudiana*) and Monk fruit (*Siraitia grosvenorii* (Swingle) C. Jeffrey ex A.M. Lu & Zhi Y. Zhang) as safest alternative sources of low caloric natural sweetener.

Stevia (*Stevia rebaudiana*): Stevia leaves contain sweet-tasting and low-calorie diterpenoid steviol glycosides (SGs). Amongst the known SGs, the most important glycoside is rebaudioside-A, which is about 300 times sweeter than sucrose. Global stevia market is estimated at 490.1 million USD with Compound Annual Growth Rate (CAGR) of 9.5 %.

Salient Features of the Technology:

- Improved variety having high rebaudioside-A (~7.4%)
- Good Agricultural Practices
- Net Return (Rs./ha/yr): 2,50,000-3,00,000
- · Green process technology for the production of white TSG
- High quality steviol glycosides powder with purity >95%



Large scale nursery



Steviol glycosides powder



Sachet



Liquid drop

Monk fruit (*Siraitia grosvenorii***):** Monk fruit is known for its intense sweet taste. The sweet taste of monk fruit results from the content of a group of cucurbitane-type triterpene glycosides known as mogrosides, and the extracted mixture of mogrosides is about 300 times sweeter than sucrose.

Technology Package:

- CSIR-IHBT, Palampur has introduced seed of monk fruit from China through NBPGR-ICAR, New Delhi (Import Permit No.168/2017)
- Quality planting material
- Agronomic practices
- Post harvest management



At flowering stage



At fruit mature stage

For further information, Contact

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