White Garcinia: the white gold for Ayurvedic medicine

While *Garcinia indica* normally produces red coloured fruits, there are a few natural mutants that produce pale yellow fruits known as ‘White Garcinia’. White Garcinia is very rare — many have never even heard of it as only about a dozen trees were found in the Sirsi forest range. White Garcinia is reputed to have medicinal properties. Ayurveda is one form of traditional medicine that relies on White Garcinia for gastric reflux and Ayurvedic practitioners all over Karnataka state compete because of a small supply of white garcinia. Due to the high demand, the market price of White Garcinia is nearly three times that of the Red Garcinia. Due to its rarity, the White Garcinia is vulnerable to local extinction and the current supply cannot meet the demand. A new strain of disease or pest problem could be enough to kill all the White Garcinia trees in the area or destroy all the fruits in a season.

While many farmers have tried growing White Garcinia in the past, it is extremely difficult to graft. White Garcinia scions are very thin, the grafts must be perfect or else the plant will die. However, farmers from Sirsi have been able to successfully grow and graft White Garcinia. Mr. Dattatreya Hegde from Salkani village explains the reason why. “There is a culture of experimentation here. We are innovators. We are always looking for new ways to improve our farming methods. I saw that I could have a lot of business selling White Garcinia so I began experimenting.” However, the path to growing White Garcinia trees was difficult and long. Initially, there was a short supply of White Garcinia scions for them to experiment. “There were only 12 White Garcinia trees in Sirsi. Some of those trees were too young and small for us to take scions from them.” The short supply impeded their learning process.

After they perfected their technique on grafting, the farmers ran into another common problem in many *Garcinia indica* grafts. Their scions were growing at an awkward horizontal angle instead of growing vertically straight. The trees grew in a bush-like fashion, severely reducing growth and productivity. Two farmers were able to successfully standardize the technique of top working that produces straight growing scions. Through experimenting, they have discovered a particular way of cutting the mother tree at a height of around 1.5 m. Their scions now grow straight. These few farmers were able to successfully grow and produce White Garcinia fruits and earn a considerable income as compared to other farmers.

These grafting techniques are also applicable to many other Garcinia species as well. Today, several farmers are able to easily grow White Garcinia. One farmer is known to have over a hundred White Garcinia trees. Through this good practice a valuable rare species in preserved on farmlands. Farmers are able to make a substantial profit and Ayurvedic practitioners can get their much valued White Garcinia fruit.

This short story gives a good insight into the value of agricultural biodiversity, how it is maintained and used successfully in the field, and how it contributes to the livelihoods and well-being of many rural households. The UNEP GEF funded project encouraged community and local institution to identify such rare and unique elite material from existing diversity and traditional knowledge system as “a good practice of diversity management” that is further promoted for multiplication of planting materials and sustainable management.

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