

Mango varieties with G.I. (Geographical Indications) in India

Alphonso, Dusseheri, Kesar, and many other mango varieties are famous around the world for their unique taste, distinct flavour, and aroma, which stems from their unique production location. Some mango varieties have been given G.I. status due to unique characteristics. G.I. is a special tag mainly given to 'agriculture', 'handicraft', 'manufactured' 'food stuff' and 'natural goods'. It is given to products that have a distinct quality and identity as a result of their geographical location. The Geographical Indication, or GI tag, is used to identify products from a specific region. The GI tag serves as proof of a product's quality and unique identity.

GEOGRAPHICAL indications (GI) are becoming increasingly important in the global branding of agricultural products. Farmers can also benefit from GI certification in order to obtain a higher price for their produce. It is especially important for mango because it is grown in tropical and sub-tropical areas of the country. Farmers who produce varieties in a unique area of production will benefit from this certification.

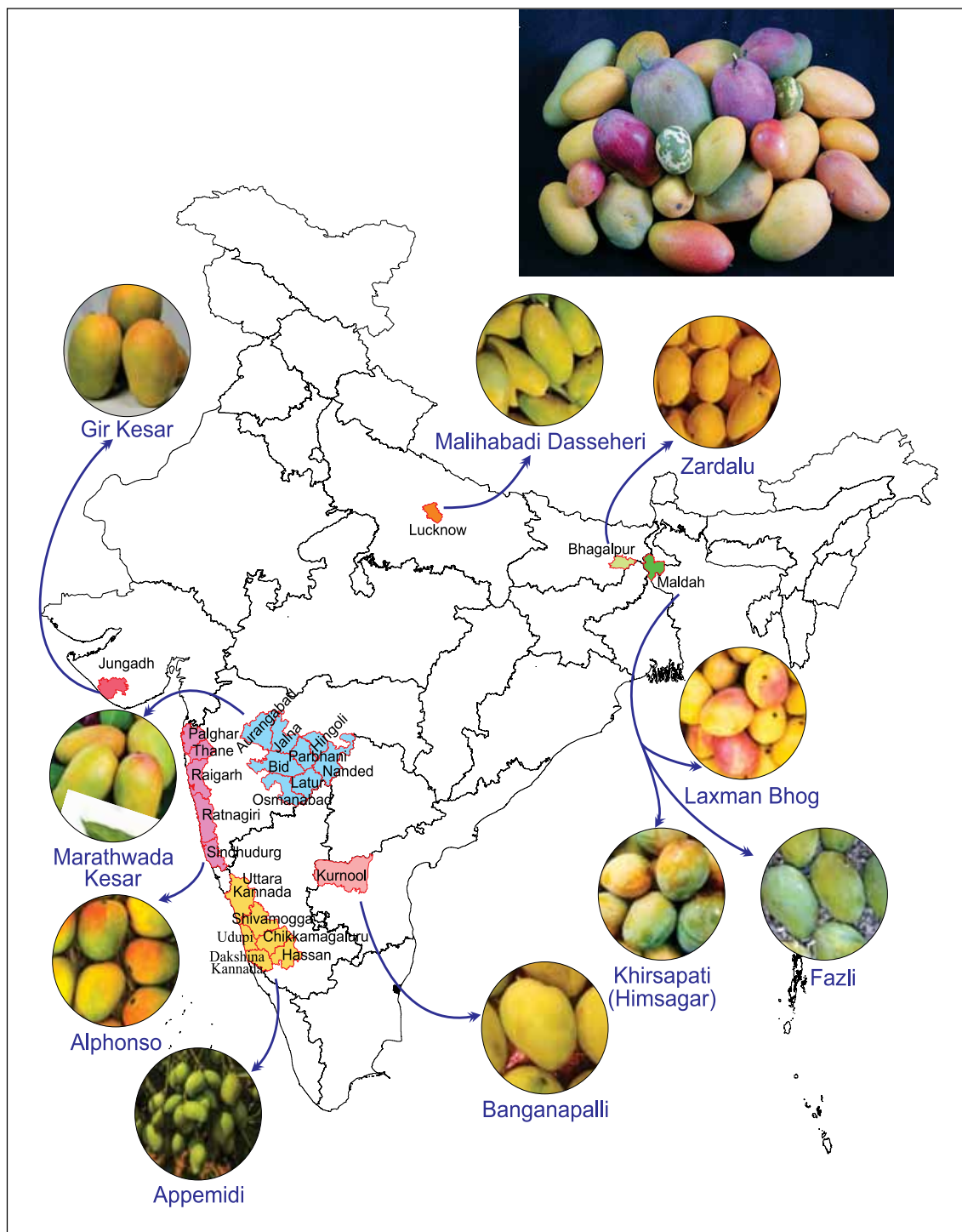
Geographical indications of goods are defined as

that aspect of industrial property which refers to the geographical indication referring to a country or to a place situated therein as being the country or place of origin of that product (Intellectual Property India). GI was covered as an element of Intellectual Property Rights (IPRs) under Articles 1 (2) and 10 of the Paris Convention for the Protection of Industrial Property. The World Trade Organization's (WTO) Convention on Trade Related Aspects of Intellectual Property Rights regulates

Table 1. G.I. Certified mango varieties from different geographical areas of India

S.N.	Name of Geographical Indication	Application no.	Specific geographical area	State
1	Laxman Bhog	111	Malda	West Bengal
2	Khirsapati (Himsagar)	112	Malda	West Bengal
3	Fazli	113	Malda	West Bengal
4	Malihabadi Dusseheri	125	Lucknow (Malihabad, Mal, Kakori and Bakshi ka Talab along the banks of Gomti river)	Uttar Pradesh
5	Appimidi	132	Shimoga, Uttara Kannada, Dakshina Kannada, Chikmagalur, Hassan and Udupi regions.	Karnataka
6	Gir Kesar	185	Junagadh (Around Gir Forest)	Gujarat
7	Marathwada Kesar	499	Marathwada Division (Aurangabad, Nanded, Parbhani, Latur, Beed, Hingoli, Jalna and Osmanabad)	Maharashtra
8	Banganapalle	241	Banganapalli (Kurnool)	Andhra Pradesh
9	Alphonso	139	The Konkan region comprising Palghar, Thane, Raigad, Ratnagiri and Sindhudurg districts	Maharashtra
10	Zardalu	551	Bhagalpur and surroundings of Banka and Munger district	Bihar
Mango varieties that have been applied for Geographical Indication				
11	Rataul	206	Baghpat	Uttar Pradesh
12	Salem Mango	406	Krishnagiri, Salem, Namakkal, Dharmapuri	Tamil Nadu

ICAR-Central Institute for Subtropical Horticulture (CISH) initiated work for registration of Chausa, Langra and Gaurjeet varieties. CISH also helped in getting G.I. for Dashehari and Rataul which has been advertised for getting GI certification.



G.I. certified mango varieties from different regions of India

GI on a global scale. India enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999, as a member of the World Trade Organization (WTO), which took effect on September 15, 2003. GI is a designation given to products that have a specific geographical origin and are distinguished by their unique qualities or reputation as a result of that origin. To function as a GI, a sign must identify the good as coming from a specific location, as well as the product's qualities, characteristics, or reputation being primarily due to the location of origin. Because the product's unique characteristics are determined by the geographical location of production, there is a clear link between the product

and its place of origin (WIPO). According to Section 2 (f) of the GIG Act 1999, "goods" include agricultural, natural, and manufactured goods, as well as handicraft and industrial goods. In India, a total of 370 goods have been registered for Geographical Indication. G.I. Certified Mangoes is one of the 112 agricultural goods that have been registered.

India is home to many world-famous mango varieties in addition to being the world's largest producer of mangoes. Mango varieties such as Alphonso, Banganapalli, Chausa, Dusseheri, Langra, Himsagar, Vanraj, Sunderja, Mankurad, and Kesar are important varieties grown in various parts of India. Due to their distinct characteristics,

Table 2. Some unique characteristics of G.I. certified mango varieties

Variety	Uniqueness of variety
Laxman Bhog	• The colour of the fruit skin is appealing. • The pulp is firm but melting, and the fibre is almost non-existent. • Excellent flavour.
Khirsapati (Himsagar)	• The colour of the fruit skin is appealing. • The flavour is characteristically pleasant, and has a sweet taste. • There are fewer fibres. • Good keeping quality.
Fazli	• Sweet and firm flesh but juicy. • Fibre is very less. • Very pleasant flavour.
Dusseheri	• Pleasant characteristic flavour and high sweet taste when fully ripened. • Fibre less. • Good keeping quality.
Appemidi	• Special variety of pickling mango • The fruits are fragile, low in fibre, and have a sour taste. • Latex has a very strong aroma.
Kesar	• The Kesar mango orchards are found in specific areas of the Junagadh region that have ideal climatic conditions and natural soil conditions for cultivation. • The variety has the naturally occurring organoleptic characteristics of taste, aroma, pulp colour and mouth feel when combined with improved agro techniques.
Marathwada Kesar	• Higher amount of TSS (total soluble solids). • Colour and taste similar to Saffron due to hot and dry climatic conditions and soil. • Yield of Kesar mango is about 3 to 4 times higher than Alphonso mango.
Banganapalli	• Traditional mango growers in the area claim that the fruits grown in this region differ from those grown in other parts of the state / country in terms of size, shape, colour, taste, and flavour. • When the tree is fully ripe, the fruit has a gleaming golden yellow colour with prominent lenticels and no blemishes or marks. • Pulp is sweet and firm. • It has a pleasant and delightful flavour.
Alphonso	• Attractive orange yellow colour • Pulp is firm but melting. • Fibreless, soft texture. • Good acid sweet blend and pleasant flavour.
Zardalu	• Exceptional fruit quality and fairly heavy bearing in nature. • Flesh firm, soft, sparingly fibrous. • Flavour very pleasant to delightful. • Taste sweet and moderately abundant juice and very good fruit quality.

some of the world's most famous varieties from various Indian regions have been granted Geographical Indication. When grown in specific regions that are distributed throughout India, these varieties are rich in some unique properties. Because of their distinct flavour and aroma, these varieties are extremely popular. The geographical distribution of these varieties, which ranges from Bengal to Gujarat and Uttar Pradesh to Karnataka, demonstrates that they develop unique qualities as a result of their growing environment.

Geographical Indication has been granted to 10 mango varieties so far. Laxman Bhog, Khirsapati (Himsagar), Fazli, Dusseheri, Appimidi, Gir Kesar, Marathwada Kesar, Banganapalli, Alphonso, and Zardalu are some of the varieties available. Apart from these varieties, applications for Geographical Indication have been made for Rataul and Salem mangoes, but these varieties have yet to receive a Geographical Indication certificate.

Benefits of Geographical Indication

1. G.I. provides legal protection to registered mango growers and authorised persons. It prevents the use

of G.I. mangoes without permission.

2. G.I. mangoes can easily fetch a premium price, potentially increasing the producers' profits. It promotes the producers' overall economic prosperity. It also aids in the expansion of economic activities in a specific geographic region, resulting in economic development.
3. Mango brand building is promoted by G.I.
4. Mango exports are boosted by G.I. certification. It also creates a market with guaranteed security, ensuring that unauthorised individuals or fraudsters are unable to enter.
5. Mango lovers will also benefit from the G.I. certification, which ensures consistency and quality.

For further interaction, please write to:

Shailendra Rajan (Director), ICAR-Central Institute for Subtropical Horticulture, Lucknow, Uttar Pradesh 226 101. *Corresponding author e-mail: srjanlko@gmail.com