



Minor Fruit Crops of Haryana

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Haryana is primarily known for the cultivation of major fruit crops such as mango, guava, citrus and pomegranate. However, minor fruit crops also play a significant role in improving nutritional security, farm income and sustainable horticulture in the state. Minor fruits are those fruit crops which are cultivated on relatively smaller areas but possess great potential due to their adaptability to diverse agro climatic conditions, nutritional value and medicinal importance. Many minor fruit crops are highly tolerant to drought, salinity, heat and poor soil conditions, making them particularly suitable for regions of Haryana where soil salinity, water scarcity and harsh climatic conditions often limit the cultivation of major fruit crops. These crops are generally hardy, require fewer inputs, and can thrive even in marginal lands. Minor fruits are also important for diversification of orchards, utilization of wastelands, and promotion of agroforestry systems. In addition, they provide seasonal employment and opportunities for value addition through processing industries.

Importance of Minor Fruit Crops

Minor fruit crops contribute significantly to the nutritional, economic and ecological sustainability of farming systems.

Nutritional Importance

Minor fruits are rich sources of vitamins, minerals, antioxidants and dietary fibre. For example:

- Aonla is one of the richest natural sources of vitamin C.
- Ber contains vitamins, minerals and carbohydrates.
- Phalsa is rich in antioxidants and cooling properties.

Regular consumption of these fruits helps improve immunity, digestion and overall health.

Economic Importance

These crops require relatively low investment and management, making them suitable for small and marginal farmers. Many minor fruits also have good market demand in fresh as well as processed forms such as juice, pickles, candies and dried products.

Ecological Importance

Minor fruit crops are often climate-resilient and tolerant to adverse conditions, which makes them suitable for sustainable horticulture. They can be integrated into agroforestry systems, field boundaries and mixed cropping systems.

Major Minor Fruit Crops Grown in Haryana

Several minor fruit crops are successfully cultivated in Haryana due to their adaptability to semi-arid and subtropical climate.

Ber (Ziziphus mauritiana)

Ber is one of the most important minor fruit crops of Haryana. It is highly tolerant to drought, salinity and high temperatures. The crop grows well in sandy, loamy and even marginal soils.

Characteristics and importance:

- Highly adaptable to arid and semi-arid regions

- Fruits are rich in vitamin C, sugars and minerals
- Requires minimum irrigation and management
- Long productive life of trees

Popular varieties: Umran, Gola, Seb, Banarasi Karaka.

Ber fruits are consumed fresh and are also used for drying, candy preparation and beverages.

Aonla (Indian Gooseberry)

Aonla is another important minor fruit crop suitable for the climatic conditions of Haryana. It is a hardy tree capable of growing in alkaline, saline and marginal soils.

Important features:

- Extremely rich in vitamin C and antioxidants
- Highly valued in Ayurvedic medicine
- Suitable for processing industries

Major uses:

Murabba, Pickle, Candy, Juice and powder

Important varieties: NA-7, NA-10, Chakaiya, Krishna, Kanchan.

Due to its medicinal value and processing demand, aonla cultivation has been gaining popularity among farmers.

Phalsa (Grewia asiatica)

Phalsa is a small bushy fruit plant that is well suited to the hot and dry climate of North India. It is mainly grown for its refreshing fruits which mature during summer.

Important characteristics:

- Short duration crop
- Requires annual pruning for better yield
- Fruits possess cooling properties

Phalsa fruits are used for preparing refreshing drinks, juices and syrups, which are highly popular during summer.

Mulberry (Morus spp.)

Mulberry is mainly known for silk production, but its fruits are also highly nutritious and consumed fresh.

Key features:

- Fast growing tree
- Adaptable to different soil types
- Fruits rich in iron, vitamins and antioxidants

Mulberry fruits are used in the preparation of jams, juices, syrups and desserts.

Other Minor Fruit Crops

Apart from the above crops, several other minor fruit crops are cultivated in Haryana on a limited scale.

Some of these include:

- Karonda (*Carissa carandas*)
- Jamun (*Syzygium cumini*)
- Bael (*Aegle marmelos*)
- Lasoda (*Cordia myxa*)
- Khirni (*Manilkara hexandra*)
- Fig (*Ficus carica*)

These crops are often planted in farm boundaries, wastelands, homesteads and agroforestry systems.

Advantages of Minor Fruit Crops

Minor fruit crops provide several benefits to farmers and the environment.

Adaptability to Harsh Conditions

Many minor fruits tolerate drought, salinity and high temperatures, making them suitable for semi-arid regions like Haryana.

Low Input Requirement

These crops generally require less irrigation, fertilizers and plant protection measures compared to major fruit crops.

Suitable for Marginal Lands

Minor fruit crops can be grown in wastelands, degraded soils and field boundaries, thereby utilizing otherwise unproductive land.

High Nutritional and Medicinal Value

Most minor fruits are rich in vitamins, minerals, antioxidants and medicinal compounds.

Processing Potential

Many minor fruits are suitable for value addition, such as:

Murabba, Candy, Jam, Squash and Pickles

This creates opportunities for small-scale agro-processing industries.

Challenges in Minor Fruit Cultivation

Despite their potential, the cultivation of minor fruit crops faces certain limitations.

- Lack of organized orchards
- Limited availability of quality planting material
- Poor post-harvest handling and processing infrastructure
- Limited market awareness
- Insufficient research and extension support

Addressing these challenges can significantly enhance the adoption and productivity of minor fruit crops.

Future Prospects of Minor Fruits in Haryana

Minor fruit crops have great potential in Haryana due to their hardiness and adaptability to changing climatic conditions. With proper research support, improved varieties, and promotion of value addition, these crops can contribute significantly to income diversification and nutritional security. Government initiatives promoting horticulture diversification, agroforestry and climate-resilient agriculture can further encourage the cultivation of minor fruit crops in the state.

Conclusion

Minor fruit crops such as ber, aonla, phalsa and mulberry play an important role in strengthening horticulture in Haryana. These crops are well suited to the state's semi-arid climate and can be cultivated even under marginal conditions with relatively low inputs. Promotion of minor fruit cultivation, along with improved varieties, better management practices and value addition opportunities, can help enhance farm income, nutritional security and sustainable agricultural development