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Underutilized Fruits in India

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Lasoda (*Cordia myxa Roxb.)*: It is known as Indian cherry, lehsua or goonda. The other important species are *C. gharaf (goondi), C. rothii, C. macleodii, C. vestita* and *C. wallichii*. Out of these, goondi (*Cordia gharaf*) is a popularly grown species. Medium size tree having dense foliage with crooked trunk. Lasora leaves have sunken stomata and other characters of drought tolerance. Plants are deciduous in nature. The vegetative growth is very fast in lasoda plant. New flush comes in spring (March) when plant enters in flowering phase. Bunches are of light yellow colored with hermaphrodite fragrant flowers borne auxiliary on current season growth. Flowering in lasoda is reported to change from place to place during the period of March-April in arid region. The duration of flowering varied from 41 to 50 days and the peak flowering reached 16 days after the first flower initiation. The development of flower bud takes about 21-22 days. The fruit is 2.0-3.0 cm long, round in shape and yellowish brown colour at maturity. Immature green fruits are available in April-May while ripe fruits are available during June-July. Fruits are mucilaginous with a stone.

Ker (*Capparis decidua Forsk.)*: It is one of the prominent unexploited plants found in the Indian desert. It is an ancient fruit of Indian subcontinent. In India ker is known for its medicinal and religious uses from antiquity. The medicinal and nutritive value of ker has been appreciated which is used to prepare various ayurvedic medicine and nutritive dishes. In Panchkuta, the important dish of arid region, dehydrated ker makes the major component. It is also used for pickle and dehydration. Ker is rich source of protein, phosphorus, potash, calcium and magnesium. Besides fresh consumption, it has processed value and therefore, emphasis is required on its large scale cultivation in arid and semi arid regions. Ker is multipurpose plant species, which every plant part is used by the local people. Fruits are highly nutritious and medicinally important. Ker tree is boon for Thar Desert. Stem wood of ker is very strong and durable. It is used to make the pivotals of stone mill. Thick wood of ker is used to make foundation around the well where as smooth thin wood of light yellow colour is used for making small agricultural implements. Ker wood resists the termite attack and therefore, thinner branches are used for fencing the field and mulching. It is also used as fuel wood in rural areas. The young twigs serve as a fodder for camels and goats. Immature flower buds and flowers of ker are used for vegetable and pickling purpose. The use of immature flowers buds and flowers of Capparis decidua as vegetable is described in literature. Ker flowers have lso been tested for cercaricidal properties.

Phalsa *(Grewia subinaequalis*): It is a minor fruit crop of sub-tropical region. It is native to India. It is one of the most hardy fruit plant, drought resistant and thus requires little care with low inputs. It can be grown almost in all parts of north India except at higher elevations. It is

mainly grown in the states of U.P., Bihar, Rajasthan, Haryana, Punjab, Gujarat, Maharashtra, Andhra Pradesh and Madhya Pradesh. Phalsa being very vigorous in growth can be an ideal plant for plugging gullies and ravines and for contours to protect bunds. The plants are multiplied through seeds and stem cuttings. Being a bush, it can be grown as filler plant in aonla, bael, ber orchards. It is mainly propagated through seeds and stem cuttings. The small fruits have to be picked from bush several times during the fruiting season and thus the cost of production is increased considerably. It is a small bush and bears many berries like fruits. Fruits ripen by the end of May and beginning of June. Fruits are perishable and keeping quality is very less.

Karonda (*Carissa carandus*): It is one of the few fruits indigenous to India while 30 species of genus Carissa have been reported; many species are found growing wildly in India while other species came from Malaysia and South Africa. It is cultivated throughout India in tropical and sub-tropical areas. In karonda plants, thorns are found. It is most suitable fruits for dry land horticulture. Karonda is generally grown on the boundary of orchard, farm, fields as biofencing. There is no regular orchard. Karonda fruits are mainly used for pickle and jelly preparation.

Pilu (*Salvadora sp.)*: It is a drought hardy tree and generally found in saline belts. Salvadora is an underutilized tree of arid region having multiple uses. The leaves are eaten by camel. There are two species commonly found in arid region i.e. S. persica, S. oleoides. It is multiplied through seeds and root suckers. There is no systematic plantation and its seed oil is very important for industrial uses.

Wood apple (*Feronia limonia*): Wood apple (*Feronia limonia Linn. Swingle*) belongs to family Rutaceae. Wood apple is also called kainth, elephant apple, monkey fruit, curd fruit, kathabel and others name in India. The wood apple is native to India and common in the wild form in dry plains of India and Ceylon. In India, the fruit was traditionally a "Poor man's food" until processing techniques were developed in the mid-1950's. It is often cultivated on borders of fields and as a roadside tree near villages and sometimes planted as orchards. There are no regular plantations however; stray plants along the border of fields, roads, railway lines and banks of the river are the common places where the plants are found.

Jharber *(Ziziphus nummularia)*: This thorny shrub is locally known as Jharber and occurs throughout North-west India. Apart from its edible fruits and fodder value, different plant parts of it have medicinal value. This is one of the multipurpose shrubs of arid zone.

Gangana (*Grewia tenax*): This winter deciduous shrub naturally occurs in buried pediments, hills and pediplains in arid region. Deep sandy loam is best soil for species, however it can grow in very shallow, skeletal, gravelly or clay soils. It is extremely drought hardy and tolerates frost. Fruits (drupe) are smooth, shinning, yellow orange to red when mature. Fruit production in natural stands varies very much.

Khirni (*Manilkara hexandra Roxb.*): In India, this species is occasionally cultivated in backyards, homestead gardens, public parts as avenue tree and in farmers' fields near villages due to its economic importance as fruit tree having nutritional and medicinal properties. The production in India is mainly concentrated in the drier states and the produce is collected by the villagers and sold in the local market. Its cultivation may be spread to arid and semi-arid areas, resourcepoor areas and wastelands where other crops cannot be grown successfully.

Mahua (*Madhuca indica)*: It is a deciduous tree that grows widely under dry climatic conditions. It is very hardy and thrives well on rocky, gravely, saline and sodic soils, even in pockets of soil between crevices of barren rock. It is one of those multipurpose forest tree species that provide an answer for the three major Fs *i.e* food, fodder and fuel. Mahua is a tree valued for its fruit, seeds, which are the largest source of natural hard fat commercially known as mahua butter or mowrah butter.

Chironji (*Buchnania lanzan*): It is a deciduous tree which produces edible seeds. These almond-flavoured seeds are used as a cooking spice primarily in India. It is cultivated across India, primarily in the northwest. After the hard shell is cracked, the stubby seed within is as soft as a pine nut. The chironji seed is lentil-sized, is slightly flattened and has an almond-like flavour. Though they can be eaten and used raw they are often toasted or roasted before use, as this intensifies the flavour.

Mulberry (*Morus spp.*): Mulberry grows throughout India but more extensive in Karnataka particularly Mysore especially for sericulture. In India, there are many species, of which *Morus alba* and *M. indica* are fully domesticated while other important species are *M. laevigata, M. rubra, M. nigra* and *M. serrata.* Mulberry is a fast growing deciduous woody perennial plant, wide-spreading, round-topped, trunk attaining 60 cm in diameter. It has a deep root system. All three mulberry species (M. alba, M. rubra and M. nigra) are deciduous trees of varying sizes. White mulberries can grow to 24 m and are the most variable in form, including drooping and pyramidal shapes. In the South on rich soils the red mulberry can reach 20 m in height. The black mulberry is the smallest of the three, sometimes growing to 10 m in height, but it tends to be a bush if not trained when it is young. The species vary greatly in longevity. Red mulberry trees rarely live more than 75 years, while black mulberries have been known to bear fruit for hundreds of years.

Cactus pear (*Opuntia ficus india L.*): Cactus pear (*Opuntia ficus india (L) Mill.*) is known as 'Prickly pear' or Cactus fig or Tuna. It belongs to family Cactaceae. Genus Opuntia has nearly 300 species, out of them, 12 species are grown for fruits, vegetable and fodder purpose. Being a succulent xerophytic plant, it is ideally suited to water scarce dry zones of the world. It requires low energy inputs to provide food and fodder for human and livestock. It is a most suitable plant for semi arid and arid regions. In India, it is found in wild state and underutilized fruit. It is a xerophytic spiny or spineless plant. It has shallow, fibrous root system. Roots are developed when the areoles are in contact with soils. The plants have thick succulent stem called 'cladodes'. These cladodes or cactus stems have numerous areoles which function like meristematic buds. The buds develop in to new cladodes and fruits (areal parts) and roots (underground parts) with passage of time.

Marula nut (*Sclerocarya birrea subsp. caffra)*: Marula nut fruit plant (*Sclerocarya birrea* subsp. *caffra*) is a member of Family Anacardiaceae. The plant is tall, dioecious, deciduous tree, which grows naturally in northern South Africa and parts of eastern Botswana. It has several medicinal properties. It is cultivated for fresh fruit in Arava valley, Israel, where annual average rainfall is about 100 mm and dry climate. In the experimental plots many branches died due to winter temperatures of -7 degrees Celsius. In the spring, however, all plants resumed their growth from the lower parts of the stem. In northern Sotho, marula trees are not cut down when land is cleared for planting and cultivation because of its high value. Marula tree bears male and female flowers on separately. It is a dioecious fruit tree and flowering takes place during summer season. Fruits are ripened during September-October month. The fruit yield depends on growing site, age of tree and management practices employed mature fruits abscise when mature but ripen only a few days later. In western arid part of India, it has introduced from Israel and evaluated for growth and development of plant. It is a fast growing fruit tree but it is susceptible to low temperature and frost during winter season in arid region. Marula fruit is very sweet, juicy and aromatic. It looks like a small yellow plum. It is eaten fresh and the flesh has extremely high vitamin C content. The TSS of fruit is 13.2o brix at full ripen stage.

Reference

1. Hare Krishna, P.L. Saroj, S.K. Maheshwari, R.S. Singh, R.K. Meena, Ram Chandra and Avinash Parashar. 2019. *International Journal of Minor Fruits, Medicinal and Aromatic Plants.* 5 (2): 01-14.