

BOTANY OF SOME PICKLE PLANTS

By S. N. CHANDRASEKHARAN

It is a matter of common knowledge that pickles form a very important item of the daily diet of an Indian. They are useful in two ways. They enable a man to eat his food with relish, and secondly they are very helpful in the digestion of food. In the light of recent advances in science, it has been proved that such of our food materials as are lacking in vitamin content have low food values. It is also known that almost all the materials used for pickling do contain the vitamins necessary for our healthy growth. In various families a statement is often made by old grandmothers that people of a generation or two ago habitually used pickles in large quantities and in great variety every day along with their food and were able thereby, to lead healthy lives and live much longer than the average man or woman of to-day. It is also claimed by them that in capacity of work and in intelligence they far excelled men of the present day. That diet has a great deal to do with the health and longevity of persons is admitted by medical men in all parts of the World. A diet accompanied by pickles is also generally recognized to be healthy and invigorating. An attempt is therefore made in this article to give botanical notes on some of the common pickles in use in South India, with the hope that those who may have a taste for them may know what they are botanically, while others that may not know them may cultivate a taste for them. In our country where economic distress is so severely felt, we have to aim at the cheapest, and yet the most wholesome food. A little of cooked rice, some salted buttermilk and a slice of pickle will make up all the *menu* that a poor man may need. Pickles are so cheap and so good that one wonders why they are not used more largely.

1. *Allium Cepa*, Linn. The Onion. *Family*: Liliaceae. *Tamil*. Vengayam.

The plant is a biennial herb with large bulbs that are usually solitary. It has been under cultivation for a long time in all parts of the Presidency and there is probably no other vegetable that is so widely and extensively used as this. The bulbs are cut into small pieces and lime juice is added and in this form they form an excellent pickle. Incidentally, it might be mentioned here that it is considered that the Allyl sulphide in Onion stimulates the flow of digestive juices and hence the recommendation of onions for people suffering from constipation and piles.

Another interesting point to be noted in onion is the presence of a small amount of starch and sugar, whence its value as invalid food in cases where starch is not advised to be taken.

2. *Capsicum annuum*, Linn. and *Capsicum frutescens*, Linn. The Chillies. *Family*: Soianaceae. *Tamil*. Milakai and Mormilakai.

Both are undershrubs extensively cultivated in all parts of the Presidency. The fruit, while forming an important spice, is also used in pickles. Raw fruits, are salted and used as such or they may be soaked in curd, sun dried and fried before use.

3. *Carissa Carandas*, Linn. *Family*: Apocynaceae. *Tamil*. Kaliaakkai. *Telugu*. Kalivi.

A common large thorny shrub met with all over the Presidency in dry forests and very often cultivated. The plant forms an excellent material for fencing. The fruits which are berries form a very suitable and cheap material for pickling.

4. *Citrus medica*, Linn., *var. acida*. The Sour Lime.—*Family*: Rutaceae. *Tamil*. Elimicham.

The plant is a shrub that is most widely grown throughout the Presidency; the chief markets being Vellore, Salem and Pollachi in the South. The value of limes is too well known to need special mention. Limes are pickled in a variety of ways; they may be salted and stored, or kept sundried or used fresh.

5. *Citrus medica*, Linn., *var. Citron*. *Family*: Rutaceae. *Tamil*. Narathan.

This is a shrub like other species of *Citrus*. The plants are cultivated in many parts of the Presidency. The fruits are pickled fresh or salted and sundried. They are considered very salutary and prescribed even for convalescents.

6. *Citrus medica*, Linn., *var. Limonum*. The Lemon. *Family*: Rutaceae. *Tamil*. Periya Elimicham.

The plant is a shrub but not much cultivated. The fruits are pickled fresh or salted and sundried.

The leaves of *Citrus medica*, Linn., *var. acida* and *var. Citron*, are sometimes pounded up with chillies and other spices to form a powdery preparation, known as *Veppilai Katti* in Tamil. This is reputed to be a most healthy condiment and is very popular.

7. *Coccinia indica*, W. and A. *Family*: Cucurbitaceae. *Tamil*. Kovai. *Telugu*. Kai-donda.

The plant is a herbaceous tendril climber commonly met with on hedges and bushes all over the Presidency. The young fruits are cut, salted and soaked in curd and pickled or sundried and fried.

8. *Curcuma Amada*, Roxb. The Mango Ginger. *Family*. Zingiberaceae. *Tamil*. Mangai Inchi. *Telugu*. Mamidi-allam.

Like all members of this family, the plant is a perennial herb with an underground stem or rhizome and large erect, leafy, aerial branches. The plant grows wild in Bengal and on the hills. The young rhizomes are salted and pickled. They are obtainable in large quantities in the Circars.

9. *Daucus Carota*, Linn. The Carrot. *Family*: Umbelliferae.

The plant is a small herb extensively cultivated in Bangalore and on the hills. The root forms an excellent vegetable. It is also cut into pieces and pickled along with slices of lime.

10. *Decalepis Hamiltonii*, W. and A. *Family*: Asclepiadaceae. *Tamil*. Mahali.

A climber common on the hills, e. g., Anamalais, Kambakkam Hills of Chingleput, Veligonda Hills of Nellore, etc.

The young roots are sold in the bazaar in small bundles. They are commonly met with in Pollachi, Coimbatore and Trichinopoly markets. The roots are soaked in water, and the bark and the thick central vascular tissue are removed, after which they are cut into small pieces, soaked in curds, salted

and mixed with lime slices and green chillies. The pickle is a good digestive and is also considered to be a blood purifier like Sarasaparilla.

11. *Elettaria Cardamomum*, Maton. The Cardamum. Family: Zingiberaceae. Tamil and Telugu. Elam.

A perennial fleshy herbaceous plant with thick fleshy rhizomes and erect leafy stems, 4 to 8 feet in height and long much branched inflorescences which arise close to the ground. It is commonly met with growing wild in tropical rain forests in Western Ghats, in Kanara, Mysore, Coorg, Wynaad, Travancore and Madura. It is also extensively cultivated in these regions at altitudes ranging from 500 up to 5,000 feet above sea level.

While there is no doubt cardamums form one of the most important spices, their use as a pickle is not known to many. Quite tender fruits of Cardamum may be salted and preserved for use as a pickle.

12. *Mangifera indica*, Linn. The Mango. Family: Anacardiaceae. Tamil. Mankai. Telugu. Mamidi.

It is a well known evergreen tree, large, spreading, growing to a height of 50 feet or even more. It is distributed all over the Presidency and is found both cultivated and wild.

The young fruits (drupes) are collected and pickled in various ways. The small sized fruits, i.e., those whose length varies from $\frac{1}{8}$ to 1 inch at the most are salted and preserved fresh and go by the name of *Vadu* in Tamil. The fairly large sized fruits are cut into pieces, spiced and preserved in gingelly oil either as *Enna Mankai* in the Tamil Districts or as the *Ava Kaya* of the Telugu Districts. Mango pickle easily lasts for more than a year and is one that is very much valued.

13. *Myristica fragrans*, Houtt. The Nutmeg. Family: Myristicaceae. Tamil. Jathikkai. Telugu. Jajikaya.

A native of the East Moluccas and a bushy evergreen tree. It is grown only in a few localities as the Burliyar Gardens on the Nilgiris, the hills of Madura, etc. The nutmeg of commerce is the large seed and the aril forms the spice *Mace*. The fleshy pericarp is cut into pieces, salted and pickled.

14. *Emblica officinalis*, Gaertn. Family: Euphorbiaceae. Tamil. Nelli.

A small tree with crooked trunk and spreading branches and of the deciduous type. It is found wild in the deciduous forests of the Presidency and is also cultivated. The fruits (berries) which are fleshy and about $\frac{1}{2}$ to $\frac{5}{8}$ inch in diameter form one of the highly valued pickles. They are salted, spiced and used. They are available in large quantities in Coimbatore, the supply being from the hills round about, particularly Marudumalai.

The fruit also goes by the name of *Emblic Myrabolan* and is largely used in Ayurvedic medicines, e.g., as one of the ingredients of the *Triphala*.

15. *Solanum nigrum*, Linn. Family: Solanaceae. Tamil. Manathakali.

A common erect annual herbaceous plant growing as a weed both in waste places and cultivated lands in all Districts and at all elevations.

The fruits which are berries are collected, soaked in sour curd salted and used as pickle. Their value as a digestive is well known. They are also salted, sundried and fried. It is considered they contain copper and as such valuable in cases of ulcers in the mouth and abdomen.

16. *Solanum torvum*, Swartz. Family: Solanaceae. Tamil. Sundakkai.

A shrub growing almost as a weed in waste places and reaching about 10 to 12 feet in height. It is distributed in all Districts while in the hills it is met with up to about 3,000 feet.

The berries are collected quite green before they are fully ripe when they turn yellow, salted and preserved. Very often, they are also sundried and fried. This is one of the cheapest vegetables for pickling purposes. A Madras measure may cost about 3 to 6 pies.

17. *Solanum trilobatum*, Linn. *Family*: Solanaceae. *Tamil*. Tootu-valai.

This is a prickly trailing or climbing undershrub. It is commonly met with as a weed in all places. It thrives very well in black soil and equally so along the Coast.

The small berries are pickled in the same manner as *Solanum xanthocarpum* or sundried and fried. The value of the leaves in cases of ulceration of the mouth is well known. Usually, the leaves are cooked like any other vegetable or made into a soup and administered.

18. *Solanum xanthocarpum*, Schrad. and Wendl. *Family*: Solanaceae. *Tamil*. Kandan Kathri.

A prostrate perennial spiny herb very commonly met with in black soils. The plant is easily recognized by its armour of spines and large conspicuous flowers.

The berries are jammed, washed to remove the bitter taste to some extent, salted and pickled in sour curd. They are considered very valuable in lung affections.

19. *Tamarindus indica*, Linn. The Tamarind. *Family*: Leguminosae. *Tamil*. Puli.

The Tamarind tree is well known in Southern India. It is both self-sown and wild and also cultivated.

The young fruits are pickled and form a favourite condiment particularly among the Telugus.

20. *Zingiber officinale*, Rosc. The Ginger. *Family*: Zingiberaceae. *Tamil*. Inchi.

A herbaceous perennial with an underground main stem or rhizome and a number of erect leafy aerial branches. They are cultivated commonly all over the Presidency particularly in Malabar and Tanjore. The dried rhizomes form the ginger of commerce. The value of ginger is well known both in Indian and English Pharmacopia. The young rhizomes are salted and pickled. The ginger pickle is considered as a necessity on the *Sraddha Day* in the Hindu household—evidently as a help in the digestion of the rich food taken on the occasion.