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OMUM OR BISHOP'S WEED (*CARUM COPTICUM*)

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Introduction. There is probably not a single household, rich or poor in South India, that does not keep a stock of omum water ready against any stomach ailment. As an infallible remedy against indigestion, its efficacy is known to all, and it is one of the few articles of medicinal use, that are sold by even the street hawkers.

The omum plant and its products have a glorious and ancient history behind them. In those early days of civilisation, when Egypt led the world, that country happened to be the sole source of supply to other nations. Later Afghanistan, Persia and other Mohammadan countries of Asia traded in this commodity and owed not a little to this plant, for their flourish and prosperity. It was in the 15th and 16th centuries that omum water came to be known in Europe for its therapeutic properties, and references eulogising the excellence of the omum water received from Alexandria and Crete, can be found in the writings of Ponnet, who was physician at the court of King Louis XIV of France. This monarch whose name will go down in history for some famous gastronomic feats must have had,—perhaps at the instance of his physician—recourse to this carminative more than once in his life, to afford relief, when inordinate greed at the dining table made him feel for his indiscretion.

In India itself, omum water has been known and used from the earliest times. Bengal was the chief Province of cultivation and source of supply, but Ujjain—famous as the capital of the great Vikramadithya—has been known to produce the best quality of omum water from the middle ages.

Area and Soil. The total area under this crop in this country is about 100000 acres, of which Bengal occupies more than a third. Madras has about 5000 acres. Curiously there is an opinion that this crop does not thrive on fertile soils, and it is therefore often cultivated chiefly on the poorer types of soils. As a garden crop it is

grown almost throughout the country, in small areas here and there in between other major crops.

Cultivation. The method of cultivation is the same as that of other dry crops. It is said that manurial ingredients have a deleterious effect on the crop and it is therefore grown in a field where another crop had already been raised before, without any fresh application of manure. The sowing is done in October—November at the beginning of the north-east monsoon, which ensures a favourable start for the crop; as it however cannot stand water logging, sowing is done by dibbling the seeds 6 to 8 inches apart, on ridges which provide for surplus water draining away. About one Madras measure of seed suffice per acre, the yield from which ranges from 100 to 120 m. m. The duration of the crop is about six months, and during this period, if rains fail irrigation has to be supplemented from wells, otherwise the outturn is likely to be very poor.

The Plant. The omum plant is an erect and short annual, often about 1 to 2 feet in height and rarely growing beyond 3 feet; the whole plant is covered with minute hairs which give a bristling appearance. The leaves which are two to three pinnate have long stalks and look scattered; the inflorescence is an umbel, which shoots out in rays, the individual flowers being pure white and very pleasing to the eye in their snow white spread.

Omum products. The ovoid fruit is the product which is of the greatest importance and for which the crop is cultivated. It is occasionally used for culinary purposes and as an ingredient in chewing *pan*, but its chief use, is as a drug. Omum is used in medicine as the omum water, a product obtained by steam-distilling the fruit, the active principle being due to a compound called thymol—a—hydroxy derivature of benzene C_6H_3 —OH.
—CH₃. and known by the popular name
—C₃H₇.

of *agowan oil*. This is a very costly oil ranging in price from Rs. 6 to Rs. 12 a pound, according to season and production and it is the mixture of this oil with water, that forms the omum water of the market. In addition to the oil which is about 25 to 30%, the fruits contain 16% of protein substances.

Trade. Ajowan oil enjoys a good amount of export trade although after the war the demand from outside markets has gone down. Before the war, out of a total of 8700 cwts. nearly 90% went to Germany, the balance being sent to America and Egypt. Latterly Japan has figured largely in the trade and it is said the oil is chiefly valued for the hydro-carbons-thymenes it contains, which are used for perfuming soaps.

Uses. The use of omum for culinary purposes has already been mentioned and as a corrective for indigestion the omum water is only

too well known. In addition, authorities claim for the omum products, aphrodisiac, diuretic and vermifugic properties. With myrobolans and rock salt it is made into a paste which serves as an expectorant for cases of sore throat. As a common household remedy against severe cold and heaviness of head, some omum moistened and crushed is packed up in a small cloth and used for inhaling.

Allied plants. The *umbelliferous* cousins of the omum plant are all interesting and useful plants. Many of them are familiar to us either in the kitchen or through grandmothers' recipes. *Hydrocotyle asiatica* (Tam. Vallarai) *Carum carui* (Tam. Shimai shombu). *Carum Roxburghiani* (Tam. Ashanta omum) *Ferula nathen* (Tam. Perungyam) *Pencedanum graveolens* (Tam. Shadakuppai) *Coriandrum sativum*. (Tam. Kothamalli) *Cumin ceynium* (Tam. Shirakam) are all members of *Umbelliferae*, the family to which omum belongs. Of these, *Hydrocotyle asiatica* has now assumed tremendous importance because, the oil of the fruit is considered to be a specific against leprosy and figures prominently in modern anti-leprosy treatment; it is also used in treatment of syphilis and as an anti-dote against mercury poisoning; *Carum carui* is used for pectoral piles while *Carum Roxburghiani* is administered to relieve bladder pain and as an antispasmodic in hiccoughs; *Ferula nathen* is supposed to be a nervine stimulant and in cases of hysteria and angina pectoris finds a liberal use. *Pencedanum graveolens* besides being well known for its carminative properties (it is from this *dhil* water is prepared) is also used as an emmenagogue. Coriander and cumin, are well known as indispensables in a tastily prepared menu, and they are supposed to correct anti-bilious tendencies.

CRAMMING WITHOUT A CRAMMER

One of our most successful poultry breeders is well known to have "no use of scientists". He is not alone. It is quite a common mistake to suppose that there is a world of difference between the scientist and the practical man. But if the scientist be not practical, he is a bad scientist, though he does not need to be a practical poultry farmer. Practical poultry men rarely realise what they owe to research workers, in breeding, incubation, and nutrition, who probably never handled a bird in their lives. Mendel, the discoverer of "Mendelism", worked on peas.

The latest scientific help for poultry men comes from a more unlikely source still—the psychologist. A study of the psychology of the hen in relation to hunger and appetite has revealed a trick or two worth knowing for the fatterer.

Certain German scientists starved hens for 24 hours and then placed a heap of wheat, 100 grams, about $3\frac{1}{2}$ ozs. in front of each one. When they stopped eating it was assumed they had satisfied their hunger; on the average, they ate 50 grams ($1\frac{3}{4}$ ozs.) each, and left the rest untouched.

But when a larger heap was put before a hen in the same state of hunger, she ate about half as much again. So it seems that the more she sees, the more she