

dissecting flaps from cheeks. There was profuse bleeding. Two hæmostatic forceps had to be kept in the dressing. Operation lasted for nearly four hours. About 11 drams. of chloroform were inhaled. Flaps were adjusted and dressed as usual.

22nd November.—Progress satisfactory. Discharged.

7. Zina Bhowan, Hindoo male, aged 18 years, resident of Bakooladang, near Patun, admitted on 10th November 1886, with nose mutilated by Makráni outlaws 14 days back. The entire cartilaginous nose, both alæ and septum, has been swept off, together with the middle portion of upper lip. He had had a short and thick nose. Rhinoplasty performed on 14th November. The lateral flaps were taken one from each cheek and brought together by sutures. They were applied to the margins of the pared nose. The operation lasted for about four hours, and 5 drams. of chloroform only were used. Bleeding moderate, usual dressing, plugs and cushions applied.

14th January.—A rather thickish nose is formed. The side cicatrices on cheeks are small, nasal openings small. Discharged.

8. Dhunji Punja, Hindoo male, aged 25 years, of Moruká, admitted on 11th November, with nose mutilated by outlaws about six weeks ago. The right ala and septum are cut off entirely and only one-third part of the left ala is left. Rhinoplasty performed on 14th. Lateral flaps were taken from cheeks and adjusted as usual. Dressing, plugs, and cushions applied. There was excessive bleeding. Operation lasted nearly four hours, and 20 drams. of chloroform used.

30th December.—Discharged. Good result.
(To be continued.)

CONTRIBUTIONS TO THE INDIAN MATERIA
MEDICA.

ON THE MEDICAL PROPERTIES OF SOME
OF THE INDIGENOUS PLANTS
OF SOUTHERN INDIA.

By P. S. MOOTOOSWAMY, G.M.M.C., F.L.S.

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Continued from Vol. XXII, page 3.

I SHOULD have mentioned at the outset of my attempting to give the medicinal properties of Indian drugs that have come under my notice and experience, that it should be understood, though a good many articles on *Materia Medica* have been written from time to time by others, yet there may be some therapeutical actions of those drugs which have not been touched on by them, I avail myself of the opportunity of trying, as I can, to fill up the gap, and hope that readers may not be induced to think that I am going over the same ground that has been trodden already by my predecessors.

No. 8.—*Dalbergia Uliginosa* Roxb.

N. O. Leguminosæ.

Diadelphia Decandria.

Syn.—*Galedupa* (Roxb.)

Robinia (Willd.)

Ref.—Roxb. *Flora Indica*, Rep., p. 539.

Vern.—Perintheraney, Tamil.

A large twining creeper found on the wet banks of rivers and nullas, flowering during the hot season. Dr. Roxburgh mentions, that it is a native of the lower parts of Bengal, but it is also to be found in the Tanjore District. I can only find the description of the plant in Dr. Roxburgh's *Flora Indica*. [This plant, under the name of *Derris Uliginosa*, Benth, is described in Hooker's *Flora of Brit. India*, vol. 2, p. 241.]

The woody stem is employed in native medicine as a stimulant, antispasmodic, and counter-irritant.

A medicated oil is prepared from the stem of the creeper with a few other drugs, viz.,—*Lal chithra*, *plumbago*, *assafœtida*, *margasæ* or *nim-oil*, bark of the root of the *Montia barloides* and garlic.

The oil is highly esteemed by the rural class of people in the southern part of the Tanjore District for its therapeutic action in the treatment of paralysis, chronic rheumatism, dysmenorrhœa, and hysterical complaints, in doses of half to a drachm twice a day for adults, and 5 to 10 minims for children—low diet. It is also employed as an embrocation externally in these disorders.

I prepared the oil and tried it in cases of chronic rheumatism and facial paralysis, with good results, but it requires further trial.

No. 9.—*Bombax Malabaricum*, D. C.

N. O. Malvaceæ

Monadelphia Polyandria

Ident.—Wight's *Illust.*, Fig. 29.

Syn.—*Bombax heptaphylla*

Salmidia Malabarica

Bombax Ceiba, Burm.

Rep.—W. & A. *Prodrom*, p. 61.

Roxb. *Flora Indica* R., p. 514.

Drury's *Indian Flora*, Vol. I., p. 85.

Balf. *Cyclopædia of India*.

Vern.—*Mool Elava Maram*, Tamil

Burunga Chettu, Tel.

Ruckta Simul, Hind.

Mullaldu Mara, Can.

Unnamarik, Mal.

Simul, Beng.

Salmili, Sans.

This is one of the large trees that are found in almost all parts of India. It grows to a very large size, and the trunk is covered with stout hard conical prickles;—leaves palmate; flowers (in February and March) large, of beautiful bright red color, rendering the tree a most conspicuous object; fruit oblong. The tree yields a gum resin

named "Moscherus," and its roots are the "sofaid moshe" of bazars. The wood is considered very useful for making tea chests, being soft, light, and easily worked.

The gum and bark are used in Hindoo medicine. The gum resin yielded by this tree appears to have been much more known to the Hindoos and Mahomedans of Northern and Western India, than those of the southern part of the country. It is said that the gum is sold in bazars under the name of "Moscherus;" it is also sold in the Tanjore District. It is difficult to get of good quality, being adulterated with that of gum acacia. I employed a man to get it from the trees wherever he could find them.

The gum resin obtained from this tree is in dark brown opaque pieces. In the fresh state, the gum is of a whitish color. A powder is prepared with one part of it, with four parts of the bark powder of the *awla* tree (*Embilica officinalis*), and administered in doses from 5 to 10 grains, with honey, twice a day, as a specific in menorrhagia, gonorrhœa, diarrhœa, and dysentery. The gum is also made into pills with aromatics, and astringent drugs, and administered in diarrhœa, dysentery, and internal hæmorrhoids; in the former two pills are given in butter, or tyre congealed, or deprived of its water; and in the latter with honey.

In over-doses it acts as a poison, producing severe vomiting, and a burning sensation of the whole body, for which the leaves of *Indigo fera aspalathoides* (*Sivanarvamboo*), Tamil, is ground and given as an antidote.

Bark.—The bark of the stem, the juice of which is mixed with cow's milk and palmyra sugar-candy, are given in cases of gonorrhœa with good results. Dr. Wight mentions that Blume in his book on the medical plants, Java, states that the bark of the root of *Bombax Malabarium* is emetic, and is employed as such in Java.

Sir W. B. O'Shaughnessy remarks in his Bengal Dispensatory, page 227.

"The *Moscherus* (gum resin) occurs in knotty opaque dark-brown pieces often with internal cavities. 100 parts yield 56 to water, consisting of gum, tannic and gallic acids. The remainder is a mixture of a tasteless resinous substance and caoutchouc. Few remedies are more extensively used by the natives than their white and black *mooslie*. Blume says, that the bark of the root is emetic, and the statement is confirmed by Rumphius, but is contrary to our own repeated trials."

"The white *mooslie* is a brittle substance, which, in the dry state, contains sixty per hundred of gum, fifteen of starch, with traces of resin, the remainder being woody fibre. The powdered root forms a thick mucilage with cold water and answers admirably as a nutritious demulcent for convalescent persons."

Dr. Dymock in his *Materia Medica* of Western India, p. 106, observes that "Mahomedan

writers state that the young roots have restorative, astringent and alterative properties; powdered they form the chief ingredients in the *Musla Semul*, a medicine which has a reputation as an aphrodisiac. The gum is very astringent, and is used by both Hindoos and Mahomedans in diarrhœa, dysentery and menorrhagia in doses of from 40 to 50 grains for an adult."

Microscopic Structure.—The same author describes the microscopic structure of the gum, which, I doubt not, will be interesting to our readers.

"*Moscherus* is not a simple juice but the product of a deceased action, which consists in proliferation of the parenchyma cells of the bark; upon making a section of the deceased part, a number of small cavities are seen, which contain a semi-transparent jelly-like substance, consisting of oblong cells with botryoidal nuclei, at the margin of the cavity, the columns of the healthy cells are seen breaking up, and the cells separating to join the jelly-like mass; this gradually increases in size and finds its way to the surface to be extruded as *Moscherus*. Upon its first appearance, it is of an opaque, yellowish, white color, firm externally, and there is no central cavity. The cause of the diseased condition of the bark, which produces *moscherus* has not been determined."

No. 10.—*Sida carpinifolia* (Linn.)

N. O. Malvaceæ.

Monadelphia Polyandria.

Ident.—Wight's *Icones*, F. 95.

Don's *Gardener's Dictionary*—Vol. I., p. 491.

Vern.—Aruvamoookoo Poondoo }
Valavalapoo Poondoo } Tamil.
Parai Poondoo }

This plant first attracted my attention during the monsoon season of 1886, growing wild in waste places and sandy soils in the Tanjore town. It is erect, about a foot or less in height with narrow lanceolate doubly serrated leaves; flowers yellow.

It is an annual plant very hardy and strong, not easily rooted out.

I find that the use of the plant is very little known in this part of the district; so much so, that the correct vernacular name could not be ascertained. It is called by some *Vettoocava Poondoo* in Tamil, from its application to cut wounds, and by others *Valavalapoo Poondoo* from its mucilagenous property, *Aroovamoookoo Poondoo* from the sharp point of the leaf. I was in difficulty of finding out the botanical name of this plant, and at last M. A. Lawson, Esq., F.L.S., favored me with its correct name.

The leaves are mucilagenous, and, from its trial, I found them to possess demulcent and emollient, tonic, astringent properties, appearing also to possess a specific influence over the genito-urinary organs.

The leaves are dried in the shade and powdered, and one-drachm doses are given twice a day in cases of dysuria.

Mr. Dey, F.L.S., remarks, that "the leaves are chewed by the inhabitants of Brazil and applied with success to the bites of wasps and bees externally." The leaves are ground and made into a paste and applied to cut-wounds, and as a cataplasm with rice flower in phlegmonous inflammations and indolent ulcers it hastens suppuration, and promotes healthy granulation.

I further find that the leaves are ground and applied in cases of œdema of the feet and legs with favourable results, acting as a good diuretic.

The roots are slender, white and $\frac{1}{4}$ of an inch in thickness at the stock, tapering, woody and fibrous, taste insipid; the decoction of the roots in doses of two ounces twice a day has a cooling effect.

Dr. Dymock in the Vegetable Materia Medica of Western India, p. 99, gives a description of a group of four plants belonging to this genus Sida—

- Sida carpinifolia (Linn.)
- „ rhombifolia (Linn.)
- „ cordifolia (Linn.)
- „ spinosa (Linn.)

and observes that, "the Hindoos regard the different species of Sida, as cooling, astringent and tonic; they prescribe them in nervous and urinary diseases and in fever; the root bark is beaten up with milk and sugar, and aromatics, and stimulants are sometimes added."

"The root of the Sida carpinifolia (Tapkaria) is applied with sparrows dung to burst boils." "The Mahomedans consider the 'bala' to be aphrodisiac."

"The authors of the Bengal Dispensary after trial of the roots of Sida carpinifolia, were unable to satisfy themselves as to its febrifuge action, but it was found to promote perspiration, and to increase the appetite, as a bitter tonic. In Goa, the Portuguese value it as a diuretic, especially in rheumatic affections. They also use it as a demulcent in gonorrhœa."

In Western India, Sida carpinifolia and Sida cordifolia are most used. The first has smooth lanceolate serrated leaves; the second cordate tomentose leaves. I shall refer to this plant again at some future date with some more information after further trial.

No. 11.—Crotalaria juncea Linn.

N. O. Leguminosæ.

Papilionaceæ (Sub. O.)

Monadelphia Decandria.

Ident.—W. and A. Prodrom, p. 186.

Syn.—Crotalaria Bengalensis (Lam.)

Do. fenestrata (Dc.)

Do. sericea (Willd.)

Ref.—Roxb. Flora Indica, R., p. 545.

Drury's Indian Flora, Vol I., p. 263.

Do. Useful Plants, p. 163.

Vern.—Sun-hemp Plant, English.

Shanal or Sanapanar Chedy, Tamil.

Shanambo, Telg.

Sunn, Beng.

Shona, Sanscrit.

Kanak, Canan, Cutictendala, (Mal).

Shanabungida, Can.

Sonalla, Kon.

A small plant, two to three feet in height, with linear leaves and yellow flowers, presenting a very pretty appearance, and cultivated very largely in several districts, and various parts of the country, in dry soil, for the sake of its fibres, which are very much employed for making gunny bags, cordage, canvas, paper, fishing nets, &c. The fibre makes a very fine tow and twine, and is largely exported to English markets. Several botanists have written much on the economic value of its fibres. Drs. Roxburgh Royle, Forbes Watson, and Colonel Drury, and the jury reports of several exhibitions abound with information on this subject.

The leaves of this plant are very much employed as a manure for agricultural purposes. Dr. Roxburgh remarks "that milch-cows are fed with them during the dry season in the Northern Circars, and that it is very nourishing, and causes them to give more milk than most other food."

The seeds are used in Hindoo medicine, they are small, and of a black colour, similar to those of horse-gram, kidney-shaped, and have a bitter taste. They are known to possess the property of causing abortion in the early months of pregnancy; half a drachm of the seeds broiled and powdered is mixed with an equal quantity of black jaggery, and administered twice a day until the desired effect is produced. The native midwives are good hands at resorting to the use of this drug for this purpose, but it is very hard to find them out. There appears to be no instance, as far as I have known, of the seeds having been given in cases of labour as a substitute for Ergot of rye. It, however, requires a trial.

The seeds are said to have been given in cases of suppression of lochia, in decoction, one drachm of the seeds broiled and powdered to five ounces of water, boiled down to three ounces; cool and strain, and add half-an-ounce of black jaggery; one and-a-half to two ounces are given twice a day.

They are also considered a powerful emmenagogue and administered in cases of chronic amenorrhœa, by the native hakims or vythians as a decoction in the following formula; I shall give the Tamil, English, and Botanical names of the drugs used, as far as I can.

Tamil.	English.	Botanical names.
Shannel Veray	Sun-hemp seed	Crotalaria juncea.
Sathacooppay	Dill	Anethum graveolens.
Caring Kolloo	Black horse-gram	Cassia Absus.
Carin Seeragum	Do. Cummin seed	Nigella sativa.
Aulee Veray	Linseed	Linum usitatissimum.
Moongle Frauny	Bamboo Shavings	Bambusa a r u n -
Oatter day	Cobwebs	dinacea
Carpooram	Camphor	aa zi

Water 3̄10; boil down to one and-a-half ounces, cool and strain, and add black jaggery half-ounce; dose, half twice a day. Diet without tamarind.

I obtained as an experiment, a fixed oil from the seeds: 20 ounces were ground with water and made into a paste, to which four ounces of sugar-candy powdered were added. This was kept in the sun for some time, for the separation of the oil. I next boiled the paste, dissolved with water, as is done for castor-oil, the oil was then separated. I got five ounces; it is clear, and has a bright yellow appearance, inodorous, with a slightly acrid taste. I shall report the medicinal properties of the oil in my next communication.

A Mirror of Hospital Practice.

MADRAS GENERAL HOSPITAL.
PURPURA RHEUMATICA ET HÆMORRHAGICA.

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and Senior Physician, General Hosp., Madras.

THE following case is published as, judging from my own experience and from the absence of recorded cases, the disease is rare in India; also the case in itself exhibits Purpura in all its forms.

It is noteworthy that with the rheumatic form the eruption was marked, and there was more or less pyrexia, while with the hæmorrhagic form these symptoms were for the most part replaced by irritability of the gastro-intestinal tract.

There was no sponginess of the gums, effusion into the popliteal space, nyctalopia, or other symptom of scurvy present.

Mr. A. B. C——n, Assistant Superintendent, Salt Department, a full-bodied Eurasian, aged 23 years, admitted on the 8th November 1887, for purpura. He states that he lives near a salt marsh, where the drinking water is brackish; that he gets no fresh vegetables, but he drinks a good deal of lime-juice; also that fresh mutton is rarely procurable.

The rash on the legs appeared about a month ago. It extends as high as to the middle of the thighs, and consists of petechiæ about the size of pins' heads with a few spots of ecchymosis about two lines in diameter; all are circular or nearly so, and vary in colour from red to deep brown; they are not raised above the level of the skin, and do not disappear on pressure. There are also some petechiæ on the arms, and an eruption of prickly heat on the back.

A week ago he got a pain in the abdomen, which continued for four days, when he vomited

some blackish matter, then greenish fluid with some specks of blood. After this, the pain in the abdomen ceased, but he got pain in the joints which still continues. The joints affected are the knees, ankles, and wrists. They are tender, but not red or swollen, but there is slight œdema of the right hand. The bowels are costive, otherwise the digestive system is healthy. Pulse 96, respirations 28; urine high-coloured, sp. gr. 1028, contains bile, no albumen or sugar. The temperature was normal on admission, but rose to 100·6°F. in the evening, and he had irregular fever during the first and fourth weeks in hospital, although taking 5 grains of quinine three times a day all the time. The temperature seldom rose above 101°F. (chart attached). Irritability of the stomach, with bilious vomiting and diarrhœa, set in four days after admission. The stools were thin feculence, contained blood, and were passed frequently; the blood was at first in considerable quantity, but ceased after two or three days; some looseness of the bowels with more or less irritability of the stomach however continued for ten days. The pain in the joints returned then, having disappeared with the onset of the gastric derangement.

The first eruption gradually faded away, but a fresh eruption appeared with the feverishness at the beginning of the fourth week after admission, when the gastric symptoms had ceased. The last eruption was on the head and face, and thickly over the buttocks where the petechiæ were large, and the itchiness so great that a sedative application was required. He was discharged at his own request exactly a month from the date of admission, but only two days after the subsidence of the second attack of pyrexia, the eruption had all but disappeared. He expressed himself as feeling well. He looked somewhat less full-bodied than on admission, and was advised to remain in hospital a little longer; but he was anxious to return to duty, and he said he would come back to hospital should he get a relapse.

CASE OF OCCLUSION OF THE MOUTH OF THE RIGHT CORONARY ARTERY IN THE COURSE OF GENERAL ATHEROMA, WITH ANEURISMAL DILATATION OF THE ARCH OF THE AORTA.

UNDER CARE OF SURGEON S. F. FREYER, M. D.,
Medical Staff.

SERGEANT J. F —, aged 41, was admitted to hospital on the morning of the 25th June 1886. His breathing was short and hurried, lips livid, and he had an anxious expression. He stated that he never felt "sick or sorry," until four nights ago, when, whilst lying down quietly in bed, after an ordinary day's duty, he suddenly felt a weakness come over him, and had to sit up to gasp for breath. This paroxysm passed off, but he had not been able to lie down since; as whenever he tried to do so, or even to doze