

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	1221	Press ~~Mis.~~
	113-114	
* Dated	6-6-	1865.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
6th June 1865.*

No. 113. Read the following Proceedings of the Board of Revenue, dated 29th May 1865, No. 2,805.

Read the following letter from J. SHORTT, Esq., M. D., General Superintendent of Vaccination, to R. A. DALYELL, Esq., Acting Secretary to the Board of Revenue, dated Madras, 16th May 1865, No. 87 :—

SIR,

I have the honor to forward a short Paper on the *Aghati* plant, with the view of supplying the want felt in the supply of green food to cattle and sheep; and as the improvement of these animals are now attracting much attention, the subject may just now prove of considerable interest to your Board. I send also *Aghati* seeds I procured in some of the Southern Districts; but cannot tell to which variety they belong.

ENCLOSURE No. 1.—With seed.

Paper on green food to cattle and sheep, by J. SHORTT, Esq., M. D.

1. I have much pleasure in drawing attention to the *Aghati* plant as a never-failing source of supplying green food to cattle and sheep. The *Aghati grandiflora* is a perennial tree, attaining from thirty to forty feet in height. It belongs to the order Papilionaceæ, or pulse section, having the butterfly form of corolla. It has an upright stem, branched at the summit, with abruptly pinnated leaves, and numerous leaflets arranged in pairs, varying from fifteen to twenty, long, obovate, and scarcely pubescent. The inflorescence is a raceme, with flowers large and showy; axillary, purple or white. The calyx is bell-shaped, slightly two lipped, segments acute, corolla papilionaceous, standard oval, oblong, keel large, falcate, with petals free at the base and apex; stamens arranged in two distinct bundles, nine and one; legumes long, twelve to eighteen inches; many-seeded and constricted between the seeds, separated by spurious cellular partitions.

2. The *Aghati* is common throughout Southern India, being chiefly cultivated on account of its leaves, flowers, and fruits, which are used in general as a vegetable by the natives, consequently these trees are frequently grown in Betel gardens, with the double object of furnishing vegetables and as a trellis to the betel vine. In some districts more to the south it is grown by itself in open fields and gardens, and under its shade various kinds of edible bulbs are raised. There are three varieties of the *Aghati*, recognized chiefly by the color of the flowers which are purple (*Aghati coccineum*), and white (*Aghati Albiflorum*) in two, and the third (*Aghati Grandiflorum*) differs chiefly in its stunted growth, attaining twelve or fifteen feet only in height, and may be purple or white flowered, and of late this last has found a place in flower gardens in consequence of their large, handsome, showy flowers. The following are the vernacular names: Tamil, *Aghaty Kerai*; Hindu., *Aghaty Kebaje*; Tel., *Arisi koora*. It is extensively cultivated in this Presidency, and the plant is indigenous to the tropical parts of Asia.

3. The leaves are gathered and tied into sheaves of about two handfuls, and sold in the bazaar for 2 Pie each bundle. The natives are partial to the plant as a vegetable; but to one unaccustomed to its use, it purges the bowels freely, and even in those that use it almost daily if partaken rather freely it acts as an aperient. Cattle and sheep are particularly fond of the plant, and will devour every part of it, even to the tender stems; but the practical native has ignored it as cattle food hitherto, because he cannot afford to lose it for his own use as a vegetable. The leaves are sold in most of the bazaars for culinary purposes. Occasionally some native, anxious to fatten a pet sheep rather rapidly, invests his money in the *Aghati* leaves, as it is greatly extolled for its fattening qualities, more especially to sheep. Such being the case, I would suggest its cultivation on a large scale as green food for cattle and sheep. The leaves may be given alone or mixed up with other fodder, and thus supply the great want of green or succulent food for cattle, &c., hitherto experienced in India.

4. The advantage of the Aghati plant consists in its rapid and ready growth at all times and in all places throughout the year. The seeds should be sown in parallel trenches, three feet apart either way. The plant after its infant period does not need water; but when it is intended to force the plants, so as to produce from six to nine crops in the year; it will need both water and manure. The best kind of manure is wood ashes and street sweepings, and by sowing the seeds in parallel trenches it will facilitate irrigation. A cawny of land comprises 6,400 square yards and should we take the stand of plants at 5,000, instead of one to every square yard, in about six weeks, if the soil has been previously manured and freely irrigated, the top of each plant will produce from half to one pound of foliage, and the 5,000 plants will give a little more than a ton of excellent succulent cattle food, taking it at its lowest yield, and the subsequent crops will average from two to five tons the cawny.

5. It should be here stated that the Aghati is naturally a lanky plant, with sparse foliage, and the object of the farmer or cultivator should be to alter this system with the aid of art by stopping the plants and forcing them to throw out numerous shoots and become shrubby. Consequently the seed should not be sown too closely so as to interfere with free branching, for the amount of green food will depend on the foliage, and every attempt should be made to encourage this, which can only be attained by a systematic course of pruning or stopping. As to a matter of economy, I believe that no other kind of green food in India can be so cheaply and readily grown as the Aghati if properly managed, and it is a fact that leguminous plants, to which the Aghati belongs, are the greatest flesh-formers. It is true the Aghati, like all green crops, contains a large proportion of water, probably from 50 to 60 per cent., which although to a great extent deteriorates its value in a humid climate, yet it is the very thing we need in a dry, arid, climate like that of India.

6. I do not base my views on any theoretical grounds; but respectfully bring them forward as the results of practical experience carried out on a small scale during a series of years, and I should be satisfied if the subject be fairly tried. There can be no doubt of its success.

The Board are much indebted to Dr. Shortt for his interesting Paper, which will be submitted for the information of Government. The seeds forwarded by Dr. Shortt will be sent to the Model Farm Committee, with the request that an early trial of them may be made.

No. 114.

ORDER THEREON, 6th June 1865, No. 1,221.

Miscellaneous.

Ordered to be communicated to Colonel Thompson at Oosoor.

(True Extract.)

(Signed) W. HUDLESTON,

Acting Secretary to Government.

To Colonel T. Thompson,
the Board of Revenue.

Ed. S. T. Augustin.

No. 2,805.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 29th May 1865.

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(True Copies and Extract.)

W. H. Lee
Acting Secretary.

To W. Hudleston, Esq., Acting Secretary to Government, R. D.
,, the President, Model Farm Committee, with seed.
,, A. Hunter, Esq., M. D., Honorary Secretary, Agri-Horticultural Society.
,, Dr. Shortt.

Ordered to be communicated to
Col. Thompson at Aofsoot.

Exd. R. H. Lee.

*1. To Col. F. Thompson and Dr. Shortt
14. To the Board of Revenue
7. To the Model Farm Committee
7. To the Military Dept. at Aofsoot*

62 June 1865.

PROCEEDINGS OF THE BOARD OF REVENUE,
No. 1156.

*Dated 29th May 1865.
Page 31, line
22nd 1st. line.*

*Pro. Secy. to Govt. Dept. of Revenue
20th 1865*

Submitting for information Paper from Doc-
tor Shortt on the use of the Aghati plant as
green food for cattle and sheep, and forward-
ing to the Model Farm Committee for trial
the seeds received therewith.

*W. H. Lee
21st 1865
on order*