

## A Note on the Disposal of Inferior Quality Virginia Tobacco

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While curing Virginia tobacco in any farm some inferior grades of leaves are obtained. Their disposal has become problematic this year much more than ever as shipments of this material to Japan, China, etc., have ceased. I wish to suggest an alternative use for this low quality leaf.

These are Guntur grades VII and VIII and consist of dead, perished and scorched leaf and immature green leaf picked which are locally known in Telugu as "Gulla", "Modu" and "Moddu patcha". Even when these grades were saleable the value of such grades was from Re. 1 to Rs. 10 per candy of 500 lb. That is to say the average price of a candy was Rs. 5. It has to be considered whether such an offer is justifiable. If any leaf is sold, it should fetch at least the cost of its preparation, i. e., curing, grading and packing. I wish to suggest a means that is more profitable indirectly than the sale of leaf for cash at Rs. 5 per candy of 500 lb. Manuring the lands plays a prominent part in agriculture and the main plant foods are nitrogen, phosphoric acid and potash. International commerce was put to a dead stop owing to the "World War" and no fertilizer is imported into India. Secondly, in the opinion of scientists organic manures are better than inorganic fertilizers. Tobacco leaf with its stem is a good organic manure.

As far as information is available, the manurial value of the flue-cured tobacco leaf is as follows :—(Werner—Tobacco Land).

Water	...	...	7 62	Magnesia	...	...	0 96	
Nitrogen	...	...	4 37	Phosphoric Acid	...	...	0 50	
Potash	...	...	5 74	Insolubles	...	...	1 94	
Lime	...	...	5 43	Others	...	...	73 44	
Total							...	100 00

With the help of the above data, I tabulate below the quantity of each plant food available in 500 lb. of leaf and the value thereof at pre-war rates so that it may be compared with the price offered in the market.

Main plant food.	Percentage available in leaf.	Plant food available in 500 lb. leaf. (lb.)	Rate per lb of plant food (pre-war).	Cost of plant food in a candy of leaf.	Remarks.
Nitrogen	4 37	21 9	0 3 3	4 8 0	N in Am. Sulphate.
Potash	5 74	28 7	0 2 3	4 1 0	K <sub>2</sub> O in Pot. Sulphate.
Phos. Acid	0 50	2 5	0 3 3	0 8 0	P <sub>2</sub> O <sub>5</sub> in Super Phos.
Total manure value per candy of leaf			...	9 1 0	

The manurial value excels the market value by about twice as much and the extra benefits of this manure are : 1) it is an organic manure which is the best of manures, 2) it benefits to the land the same year it is applied if well-rotten compost is prepared out of it, 3) it has its residual effects for three years at least. For the above reasons, I advise my co-farmers not to sell their low grade leaf unless the cost of flue-curing and sun-curing can be realized. It is no loss to a farmer at any time if it is not sold. It may be used as manure. There is the Agricultural Demonstrator to teach us how compost can be made solely with tobacco leaf or scrap or in combination with other organic substances to make a well balanced complete manure.

### **Insect Enemies of the Cashewnut Plant (*Anacardium occidentale*) in South India**

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Though an exotic species the cashewnut plant has gained a strong foothold in this country, especially along the coastal and submontane areas of the West Coast from the Cape in the South to almost as far as Bombay and in different parts of the Coromandel Coast. Due to great demand for the cashew kernels from outside countries, thousands of acres of waste land which have been left uncultivated till recently have been planted up with this tree and year after year new areas are planted up. This is a tree which is found to grow well in almost all kinds of soils, and especially in well drained rain fed hill sides and the sandy coastal tracts; it begins to bear well and give a good return in about six to eight years.

Prospective planters of this crop will, however, do well to bestow sufficient care and precaution towards the healthy growth of the tree free from diseases and pests to which this crop is frequently subjected. As the area under this crop is bound to increase year after year in proportion to the growing demand, the chances for pests and diseases to multiply are great, as has been the experience with crops like sugarcane and groundnut in S. India. While even in the case of several crops like those mentioned above, pests of minor importance in the old days have begun to assume the status of major pests, in perennial plants like mango, cashew or other trees such pests have greater chances of rapid multiplication and wider distribution when the area under the food plant increases rapidly and no attention is paid to these pests in the early stages. In this paper an attempt is made to give a brief account of the different insects associated with this plant, their bionomics as far as we know and a few suggestions towards their control.

**Sucking insects.** As in the case of most fruit trees it is during the younger stages of their growth that the plants are more subject to pest attacks. The more important of the insects which cause injury to the growing plant are insects of the sucking type which feed on the sap of the tender parts and cause fading. These include the following:—