

No. 1 NEWS LETTER OF CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY, MARCH, 1979

# A WORD ABOUT OUR INSTITUTE

Central Tobacco Research Institute was established during 1947 under the aegis of the erstwhile Indian Central Tobacco Committee for initiating fundamental works on all tobaccos and conducting applied research on flue-cured Virginia and Lanka tobaccos grown extensively in the region. Cigarette Tobacco Research Station, Guntur. established in 1936 under the then Imperial Agricultural Research Institute was annexed to it in that year. During 1947–52 Regional Research Stations were established at Vedasandur (Tamil Nadu), Pusa (Bihar) and Dinhata (West Bengal) for conducting research on chewing, cheroot, hookah, cigar filler and cigar wrapper tobaccos. The Research Station at Hunsur (Karnataka) was established during 1957 to evolve control measures for the diseases on tobacco grown in that State.

After the abolition of ICTC, our Institute and the Regional Research Stations were brought under the administrative control of the Indian Council of Agricultural Research during 1965. During 1977 another Research Station at Kandukur was established to conduct research for the betterment of the Southern Light Soil belt of Andhra Pradesh. A Research Centre was established during 1971 at Devarapalli in West Godavari District for research on flue-cured tobacco of the Northern Light Soil belt of Andhra Pradesh and a centre at Jeddangi during 1976 in the East Godavari District Agency tract of Andhra Pradesh for research on Burley tobacco.

Organisation chart of the Institute and the Regional Research Stations is given over leaf:

# ORGANISATION CHART

# CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY

For Research on flue-cured, Lanka, Burley, Natu, Hookah, Chewing, Cigar filler, Cigar wrapper, Bidi Service Research projects at Rajahmundry, Guntur, Pusa, Dinhata & Hunsur All India Coordinated Administrative and Accounts. Library Farm operations & Farm Management. Research

Division of Genetics and

Plant Breeding

Leaf Analysis for Quality assessment

Soil & Water Analysis

National Demonstration Trials on Varietal Trials on farmers' fields

farmers' fields

Publicity & propaganda of package

of practices.

Training in Tobacco Production Supply of pure seed & seedlings

technology.

Division of Agronomy &

Soil Science.

Division of Biochemistry,

Technology & PI. Nutrition

Section of Entomology

Section of Pathology

Section of Statistics

Section of Engineering

Section of Scientific &

Coordination

Section of Extension & Training.

# Regional Research Stations:

Guntur: Agronomy & Pl. Breeding

-op-Vedasandur:

Dinhata: Agronomy, Pl. Breeding,

Chemistry, & Pl. Protection Hunsur: Agronomy, Pl. Breeding,

& Plant Pathology

Kandukur: Agronomy, & Pl. Breeding

The Institute and the Research Stations have a total sanctioned strength of 575, comprising 101 scientists, 187 technicians, 215 supporting staff and 74 administrative staff.

Tobacco is an important commercial crop of India grown over 4,50,000 hectares earning about Rs. 500 crores of excise revenue and Rs. 100 crores foreign exchange to the National ex-chequer. In view of its importance to the Nation, farmers, traders, exporters and consumers, besides thousands of labourers, curers graders and cottage industries, CTRI and its Regional Stations are whole heartedly devoted to the improvement of yield and quality of the various types of tobacco grown in the country. The impact of research is found in a steady and pronounced increase in the national average yield from about 700 kg/ha in fifties to 950 kg/ha during 1975-76. Yields in our Research Farms are, however, double that of National average. Therefore, in collaboration with the Tobacco Board of India and the State Agricultural Department several demonstration and extension trials are being conducted on the farmers' fields to focus their attention to the benefits accrued by adopting the research findings and recommendations of C. T. R. I.

Results of numerous investigations carried out at CTRI have been published in several reputed scientific journals and about 550 articles have been published so far. In addition, several bulletins, brochures, leaflets and pamphlets are being published from time to time. A journal 'Tobacco Research' is being published since 1976, the year in which CTRI celebrated its Silver Jubilee. However, an acute need is felt to bring out this 'CTRI News Letter' to cover the ever increasing and fast expanding activities of this Institute, besides timely presentation of research highlights for the benefit of all those interested in tobacco. We fervently hope that this venture will satisfy the needs of the staff of this Institute, agricultural scientists in India and abroad and all those concerned with tobacco in our country and enable us to serve them better in the fields of research. training and extension and also to bridge the gap between potential and actual yields effectively and quickly. CTRI is aware of this challenge and is responding with full dedication and determination at its command and we are confident that our endeavours and efforts will be crowned with success.

## IMPROVED VARIETIES

The following improved varieties which were evolved at this Institute and its Regional Research Stations were found suitable to the tracts specified as hereunder:

Type	Varieties	Area suitalle for cultivation
F. C. V.	Kanakaprabha, CTRI Spl. and Dhanadayi.	Black clayey soils
A	CTRI Spl., Dhana- dayi and GSH-3 (Jayashree)	Southern Light Soils
	Powdery mildew resistant lines 2359 and 1494	Karnataka State.
Natu	D. G. 3 (Prabhat) and D. G. 4	Guntur Natu tract
Burely	Momi-2 (combined mosaic-mildew resistant)	Agency area of East Godavari
Cigar		Wrapper tobacco
Wrapper	S 5	belt of North Bengal.
Cigar filler	K.V-1; V.V-2, Olor-10	Cigar filler tract of Tamil Nadu.
Cheroot		
(a) Lanka	DR-1, Line 2331	Riverside lankas
(b) Oosikappal	O.K-1, I-737; H.V. 69-8 (Bhavani Spl.)	Bhavani tract of Tamilinadu
Chewing:		
(a) Sun-cured	I-64, HV 67-10 (Bhagya lakshmi) I-115. VR-2, VTK-1	Sun-cured chewing tobacco tract of Tamilnadu
	DP 401, Sona, Gandak Bahar	North Bihar tract
(b) Smoke-cured	PV 7, HV 67-30 (Thangam)	Green tobacco tract (Madurai, Dhara- puram) of Tamil- nadu
(c) Pit-cured	VD-1, Vairam	Pit - cured tract Palladam. Gobi and Avinashi Taluks) of Tamilnadu
Hookah and Chewing	HD 65-40; DD 437,R-12	North Bengal and Bihar tobacco tra-

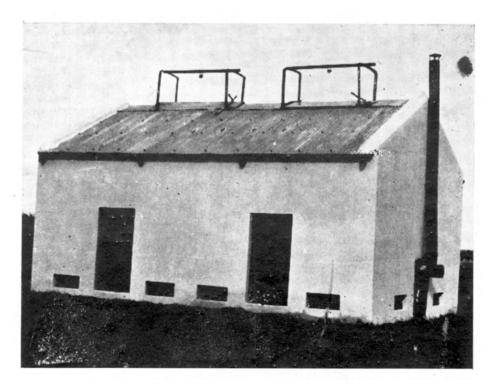
cts

N. rustica)

# NEW EQUIPMENT RECENTLY ACQUIRED:

- 1. Proportional counter
- 2. Auto analyser
- 3. G. L. C. (Pestiliser)
- 4. Cigarette Making and Cigarette Smoking Machine
- 5. Atomic absorption spectrophotometer.
- 6. Electronic calculator
  Microsystem-1121
- 7. An Flectrostatic photocopier (Panaprint)

# INSTRUMENTS DEVELOPED AND FABRICATED



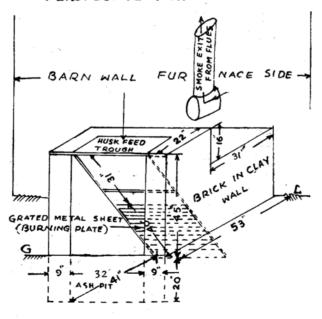
Low Profile barn

# INSTRUMENTS DEVELOPED AND FABRICATED



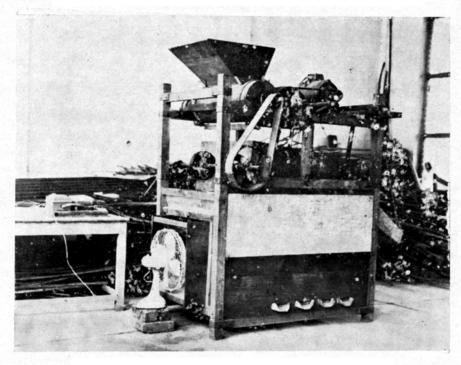
Paddy husk furnace

# PADDY HUSK FURNACE FOR A FLUE CURING BARN C.T.R.I RAJAHMUNDRY PERSPECTIVE VIEW

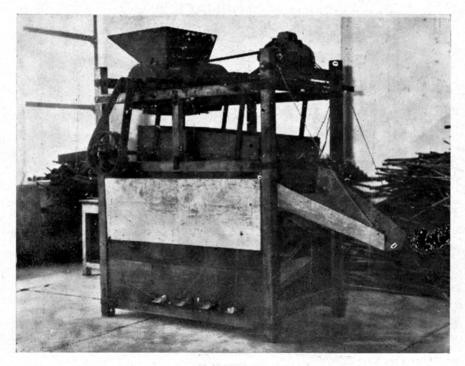


Paddy husk furnace

# INSTRUMENTS DEVELOPED AND FABRICATED



Seed Threshing Machine ( side view showing seed delivery channels )



Seed Threshing Machine (side view showing chaff delivery channel)

# 'Lab to Land' Programme by CTRI

- Demonstration of the improved package of practices in the farmers' nurseries for obtaining the healthy and vigorous seedlings
- Demonstration of the benefits accrued by applying neem kernel suspension protecting tobacco nurseries from damage by tobacco caterpillar Spodoptera litura F.
- 3. Demonstration of the advantage of growing T. M. V. resistant F. C. V. tobacco varieties in Prakasam and Fast Godavari Dists.
- 4. Demonstration of advantages of curing in low profile barns in Andhra Pradesh and Karnataka.

The programme will be inaugurated by Hon'ble Shri Y. Venkatarao, Minister for Agriculture, A. P. on 28th May, 1979.

# FARMERS' DAY CELEBRATIONS

Farmers' Day was celebrated on 11th February. 1979 at C. T. R. I. Farm, Kateru. Hon'ble Sri Y. Venkatarao, Minister for Agriculture, A. P. inaugurated the function. Shri S. Chakravarthy, IAS, Chairman, Tobacco Board presided over the function. Smt. T. Satyavathi Parliamentary Secretary, Govt. of Andhra Pradesh also attended the function as Chief Guest. Dr. N. C. Gopalachari, Director, Central Tobacco Research Institute, while welcoming the Chief Guest and the farmers, narrated briefly the achievements made during the year and requested the cultivators to adopt the new technologies in their fields and get the benefit. More than 600 cultivators have attended the meeting and all the cultivators were taken round the experimental fields and exhibition stall and apprised of research activities and achievements. Growers expressed their immense happiness over the achievements and voiced an enthusiastic demand for early release of GSH-3 evolved by CTRI. Director promised them to extend all sorts of help and requested them to take up the new technologies proposed to be released by CTRI during Golden Jubilee of I. C. A. R.



Hon'ble Minister Shri Y. Venkatarao inaugurating the exhibition arranged in connection with Farmer's Day celebrations at CTRI Farm Kateru



Hon'ble Minister Sri Y. Venkatarao delivering inaugural address Farmer's Day programme at CTRI Farm Kateru



Hon'ble Minister Sri Y. Venkata Rao, going round the exhibition stall.

# TOBACCO INSTITUTE CLUB

Tobacco Institute Club has completed 25 years of continuous activity and the Silver Jubilee celebrations are programmed to be held during May 1979.

### PERSONNEL

Shri G. H. Chandwani, Scientist Gr. 2(Plant Pathology) retired from service on 31st March, 1979.

Kumari V. Ushashree, Scientist-S·I (Biochemistry) from CTRI, Rajahmundry and Dr. G. Bhaktavatsalam, Scientist-S.1 (Plant Pathology)/Central Tobacco Research Instt. Research Station, Hunsur were deputed for A.R.S. training on 21st March, 1979 to National Academy of Agricultural Research and Management at Hyderabad.

# PAPERS, BULLETINS AND LEAFLETS PUBLISHED

1. Polygraph method for expression of morphological variation in Cigar filler tobacco.

Suryanarayanamurty, N. and Rao, R. V. S. Ind. Jour. Agric. Sci. 49 (1) 45-7, 1979.

2. Activities and progress of Central Tobacco Research Institute, Rajahmundry, Andhra Pradesh.

By Dr. N. C. Gopalachari.

3. Fertility of Soils growing F. C. V. tobacco in Nellore District of Andhra Pradesh.

By V. Krishnamurty, N, C. Gopalachari & B. V. Ramakrishnayya Tech. Bull No. 2, 1979,

# 4. 'LAB TO LAND' POPULAR LEAFLETS.

- i) 'Good news to the Tobacco growers' Neem seed kernel suspension gives good protection to your tobacco nurseries from tobacco caterpillar damage, 1979 (English and Telugu).
- ii) New Scientific methods for growing quality tobacco nurseries (Telugu)
- iii) Grow new tobacco mosaic virus resistant F.C.V. varieties and get more profits (Telugu).



Hon'ble Minister visiting the experimental plots along with Director, CTRI Scientists and other distinguished visitors. Sri S. Chakravarthy, Chairman, Tobacco Board in the foreground examining the tobacco plant.

Printed by A. Nageswara Rao at Saraswathi Power Press, Rajahmundry-1; Branch: Visakhapatnem-1
Associates: Vivekananda Printers, Lakdikapul, Hyderabad-4.

