It may also be noted that the 'Bontha' plantain generally useful only as curry stuff, is more paying in places near Madras, than the Poovan and other varieties used as fruit, for there is greater import of the latter from the mofussil, at all seasons.

It is also to be pointed out that in Sothuperumbedu no necessity for propping trees in bunch is generally felt, the trees, perhaps owing to their being single, not growing very tall, and the constant watering in summer maintaining the rigidity of the so called sten.

G. JOGIRAJU.

Notes.

Tobacco curing in Java.—Experiments were carried out in a drier, heated by a wood stove and aerated by a horizontal electric-fan. In spite of the provisional plant, it has been shown that if the temperature and moisture are well regulated in the interior of the drier the curing proceeds normally and the flexibility of the leaf is maintained to the end; the chief condition of success appeard to be the hermetic closing of the drying shed. It was found that the air could be kept moist by passing it through a series of pieces of sufficiently thick cloth continuously steeped in water; sprayers gave no results. The experiments will be repeated in a more scientific manner to discover whether it is possible to regulate the process of tobacco curing.

It was to be expected that during the first period of curing (while assimilation and respiration are still going on in the detached leaf) light would have some effect upon the process, and consequently upon the product and during the second period (while the leaf is changing colour) light might also play an important part in the little known alterations that take place. Very careful experiments, however, made both in the ordinary drier and in the laboratory have revealed no difference in the quality or colour between leaves dried in darkness or those dried

in day light or green light. It therefore seems unnecessary to illuminate the drying apparatus with green light or to keep it in the dark as is nearly always done. (Experiments by Mr. Jeusen. Bulletin of the Inter. national Inst. of Agriculture—Extracted. K. U. K. M).

Indian Jute Industry formed the subject of a recent lecture by Mr. C. C. McLeod before the Royal Society of Arts and now published in the Journal for December. The publication in addition contains numerous illustrations showing the various stages of Jute Industry commencing with the cultivation. In Bengal, Cooch Behar and Assam over 3½ million acres are under Jute. It was not till 1855 that the first Jute mill was started in Calcutta and now the Calcutta mills turn out about 3,000 tons of manufactured goods a day. (Extract K. U. K. M.)

Purifying water:—A simple method of purifying almost any infected water needed for drinking without boiling it, has been worked out by Dr. G. G. Naismith, Director of Heath Laboratories of Toronto, Canada, and Dr. R. R. Graham, Assistant Chemist. The process is as follows:—Add a teaspoonful (not heaped up) of chloride of lime (costing about 6 d. a half pound bottle), containing about one-third available chlorine, to a cupful of water. Dissolve and add in any convenient receptacle three more cupfuls of water. Stir and allow to stand for a few seconds in order to let the particles settle. This stock solution, if kept in a tightly-stoppered bottle, may be used for five days. Add a teaspoonful to two gallons of the water to be purified, stir thoroughly in order that the wet chlorine solution will come into contact with all the bacteria and allow to stand for 10 minutes. This will effectively destroy all typhoid and color bacilli or other dysentry producing bacilli in the water. The water will be without taste or odour and the trace of free chlorine added rapidly disappears.

[From inquiries made in Brisbare, we can state that the above can be thoroughly recommended, the only caution given by the Government Analyst's Department being against the tendency to use more of the chloride of lime than is prescribed, which may impart an undesirable taste. Use less rather than more.—Editor, "The Australian Sugar Journal".]

Water containing mud in suspension is easily clarified by dropping hot wood ashes into it, or by the application of lime or alum. These two latter substances make the water hard. Chloride of iron may also be used. It is quite harmless, and a valuable constituent for all animals. Medical men prescribe iron in one of its several forms as a tonic. One pound of chloride of iron (2*d*. per lb.) will clarify 1,000 to 2,500 gallons of muddy water, and much reduce the bacterial contents. [The Australian Sugar Journal Page 680.]. K. K. R.

The Tomato:—There is no doubt that the tomato is indigenous to America. Exactly where it originated is a mooted question. The name seems to be of Aztec origin, given by some as "tomatl" and by others as "xitomate.". The word still exists in names of Mexican towns, such as Tomatlan, Tomatepec, &c. Humboldt states that the plant was cultivated for its fruit by the Mexican natives long before the Spanish conquest, while Alphouse deCandolle, in his "origin of cultivated plants" arrives at the conclusion that the plant and its culture for edible purposes originated in Peru, and thence spread to other sections of the Americas. At any rate, it had been known and cultivated extensively in these countries for centuries before the Columbian discovery, and there is little doubt that many of the plants seen and described by the European invaders as wild species were really cultivated varieties originated by the Indians by crossing of selected species. Botanically the common tomato belongs to the order *Solanaceae* and the genus *Lycopersicum*, the species which is usually cultivated for food purposes being named

Esculentum. The designation of the genus, derived from *Lykos*, a wolf, and *persica*, a peach, had its origin in the supposed aphrodisiacal qualities and in the real beauty of the fruit of the vegetable. (Bulletin of the Pan-American Union). W. R.

Departmental Notes.

The following promotions are ordered with effect from 1st April 1916—vice M. R. Ry., D, Balakrishna Murti Garu, 1st Grade Manager of Agricultural stations on other duty as Sub-Pro Tem, Assistant Director of Agriculture.

M. R. Ry., A. V. Thirumuruganatham Pillai, Manager of Agricultural Stations, 2nd Grade (Rs. 175) to 1st Grade (Rs. 200) Sub-Pro Tem.

M. R. Ry., S. Subramania Ayyar, Manager of Agricultural Stations, 3rd Grade (Rs. 150) to 2nd Grade (Rs. 175) Sub-Pro Tem.

M. R. Ry., C. Narayana Ayyar, Agricultural Demonstrator 4th Grade to 3rd Grade—Rs. 150—Sub-Pro Tem. with effect from May 1st 1916.

V. Ramanatha Ayyar, L. Ag. of Nambedu, Wandiwash, North Arcot is appointed Assistant Demonstrator on Rs. 35 on probation and is posted to Palur.

R. Swami Rao of Madanapalli is appointed Assistant Demonstrator on Rs. 35 on probation and is posted to Hagari. To join on or before May 21st.

P. V. Raghavendra Rao, Sub-Assistant in Economic Botany is transferred to the Central Farm as Assistant Manager of Agricultural Station, with effect from June 15th. Assistant Manager K. Ramanujachari is transferred to the Paddy Breeding Station as Sub Assistant in Economic Botany from the said date.

The undermentioned officers are granted privilege leave for the periods noted against their names.

M. R. Ry., M. Mangesha Rao, Manager of Agricultural Stations, Sugarcane Station, Coimbatore.—3 months from the 10th June 1916.

M. R Ry., K. Ramiah, Manager of Agricultural Stations and Sub-protem Assistant in Economic Botany.—One month from or after the 15th May 1916.

M. R. Ry., T. R. Venkasami Rao, Assistant Agricultural Demonstrator, Tanjore District under orders of transfer to Hagari, Bellary.—6 weeks from date of availing.

N. V. Viswanatha Ayyar, Assistant Manager, Palur Agricultural Station.—One month from date of relief.

K. M. Jacob is appointed Assistant Demonstrator on probation and posted to areca palm work in South Malabar.

The undermentioned officers of the Agricultural Department are granted privilege leave for the periods noted against their names.

M. R. Ry., Y. Ramachandra Rao, M. A., Acting First Assistant to the Government Entomologist.—One month from 7th May 1916.

M. R. Ry., S. Sundararaman, M. A., First Assistant to the Government Mycologist.—One month from 26th April 1916 with permission to prefix the Easter holidays.

M. R. Ry., B. Viswanath, F. C. S. Assistant in Agricultural Chemistry is granted 15 days' privilege leave from the 5th June.—To proceed on leave from the Krishna District and to rejoin duty there.

The following transfers are ordered. This supersedes orders previously issued.

M. R. Ry., Mangesha Rao, Manager, Sugarcane Breeding Station, Coimbatore in granted 3 months privilege leave from June 3rd not 10th as originally granted in R. Dis. 209/3—6—16.

M. R. Ry., K. Unnikrishna Menon is posted to the Sugarcane Station to relieve M. R. Ry., M. Mangesha Rao.

M. R. Ry., K. T. Alwa will relieve M. R. Ry., K. Unnikrishna Menon on June 2nd.

Assistant Agricultural Demonstrator M. R. Ry., K. Ramanatha Ayyar will remain at Sholavandan.

On return from leave, Assistant Manager M. R. Ry., T. R. Venkasami Rao, will take charge of Sirvel from V. S. Ramasami Ayyar.

The chain following V. S. Ramasami Ayyar's transfer holds. Vide D. Dis. 191, dated 8th April 1916.

M. R. Ry., K. Ramanatha Ayyar is posted as Assistant Agricultural Demonstrator, South Arcot and is to report himself at Palur farm forthwith.

M. R. Ry., C. V. Seshachari, Agricultural Demonstrator is transferred to the Sugarcane Station Coimbatore as Manager to relieve M. R. Ry., Mangesha Rao, on June 19th.

M. R. Ry., Mangesha Rao, Manager, Sugarcane Station is granted 3 months leave from date of relief.

M. R. Ry, V. S. Narayanaswami Ayyar, Assistant Manager of Agricultural Station, Central Farm, Coimbatore, is granted one month's privilege leave from 1st June 1916.

K. S. Sankara Pillai of Palamcottah is appointed to act.

M. R. Ry., S. R. Venkatakrishna Mudaliar B. A., Assistant in Mycology is granted privilege leave for one month from 29th May 1916.