

These vegetables are cultivated in both dry and wet lands, in the former from January to November and in the latter from September to February. The crops are mostly rainfed supplemented by pot-irrigation at the early stages, in the case of dry lands and late stages in the case of wet lands. Details of the cultivation of these vegetables will be dealt with in future notes.

The villages mentioned above contain 75% of dry lands including topes and the rest being narrow strips of paddy land between ranges of hills. Manure supply is limited and most of the available quantity is used for dry land cultivation.

The uneducated poor cultivators in whose hands entirely lies at present the supply of vegetables have to carry every day their produce to the town which is bought off in the way by middlemen and in the town by shop keepers at a cheaper rate and the latter dictate their own terms to the customers. The shop-keeper gets the lion's share. Neither the hard working cultivators nor the easy going consumers are in any way benefited.

It has been observed that the system of cultivation as adopted at present is very unsatisfactory and will admit of considerable improvements as the facilities for such are really great.

There is ample scope therefore for some scientific agriculturist with only a limited initial capital to start systematic vegetable cultivation in any of the villages mentioned above which are all connected by roads to the town where the demand for vegetables is ever on the increase. He can thereby become rich and serviceable to the public.

M. Govinda Kidavu.

Notes.

A tree known locally as Ambach has been found out from the region of lake Chad by some explorers. It belongs to the *mimosa* family. Ambach grows in abundance in the

muddy river tracts of that region and grows with such rapidity that a few months suffice to cover a vast region of swamp with impermeable forest. In a season it attains a height of 12 to 15 feet with a diameter of 8 to 10 inches. The most remarkable property of the wood is that its specific gravity is $\cdot 1$ when dry and $\cdot 34$ when impregnated with water while the specific gravity of dry cork is from $\cdot 2$ to $\cdot 24$. The texture of the fibres is, however, close enough to enable the timber to be sawn into planks which have been already used for making tables and doors. The warlike tribes residing in the Chad region make shields out of it. Logs of this timber can be safely used for crossing rivers or making life-belts and floats.

Attempts are being made to cultivate it in Algeria and the South of France wherefrom hails the party of explorers who found out the plant. *K. U. K. M.* (*The Indian Agriculturist*).

Treatment of cholam (shorgum) seeds and other cereals before sowing against the attack of mice, rats, ants and birds:— Take a pan half full of wood-ashes; take enough kerosine to damp this, but not to make a thin paste. Soak the seeds for two or three hours in water, then put them in the mixture and shake it through. The seeds get coated and can then be sown. They may then be shaken through a sieve to get rid of the superfluous wood-ashes, but this is not necessary.

The seeds can also be treated by being coated with tar. Put the seeds in a bucket or kerosine tin, and pour coal tar thinned with kerosine if necessary, over it. Shake the tin until all the grain is treated and the superfluous tar can be poured off. It has been found to be sufficient to soak the grains in tar-water which is made by keeping water for some weeks on tar, and stirring occasionally; then draw off enough of the water to soak the seed for three or four hours in it.

The kerosine and wood ashes method is the cleanest and easiest. *K. R. (Agricultural News).*

Mr. V. H. Gonehale says that the rotation,—1st year cattle manure, 2nd year fish manure and 3rd year 10 lbs salt per tree—is practised in Konkan Division for coconut and mango trees. *M. R. R. (From Bulletin No. 59 of 1914 of the Bombay Agri. Dept.).*

Sir A. H. Church, K. C. V. O., F. R. S., M. A., D. Sc., &c. died on 31st May at the age of 81 in Kew gardens. He was Professor of Chemistry in the Royal Agricultural College, Cirencester, for several years and was also Professor in the Royal Academy of Arts and the Cooper's Hill College. His range of chemical knowledge and contribution to chemical literature were wide and varied. He had made a special study of Agricultural chemistry and contributed largely to vegetable chemistry. He is best known to Agricultural students by his revised edition of "Johnson's chemistry of common life," his "Laboratory guide" and his "Foodgrains of India." He was one of the greatest authorities on the chemistry of Paints, Precious Stones, Porcelain and Earthenware on each of which he has written good books. *M. R. R. (Chemical News).*

A Student of Class III writes as follows about an excursion to Pallapalayam:—"Pallapalayam is a small village in Palladam Taluq and is situated eight miles east of Coimbatore. It has 1250 acres of cultivable land of which a major portion (as much as 700 acres) forms wet lands which are protected by a tank of three months supply, the Noyal river channel and wells. The chief crops grown are paddy, sugarcane and betel-vine.

In this village we found an enthusiastic and well-to-do ryot owning about 25 acres of wetlands, who spoke very highly of the departmental work. His appreciation of the work of the Department has resulted from his own personal experience with regard to planting

single seedlings of paddy for the last three years. He said that in this method of planting, he got increased outturn both in grain and straw. He attributes this higher yield to the vigorous growth and tillerings of the plant when planted singly.

As a consequence of his success in single planting the Department was able to win his confidence and recently on the suggestion of one of the Farm Managers, Mr. W. Raghavachari, he has begun to grow green manure crops in paddy lands.

In two plots, each measuring $2\frac{1}{2}$ acres he has grown Daincha (*Sesbania Aculeata*) with seeds of his own production. In one plot the seeds were sown in the first half of May (beginning of Vaikasi) and the other about the end of May. He took advantage of the water on the opening of the channel to start the germination in both cases and with one more irrigation and the help of the few showers of rain, daincha has grown quite uniformly throughout the plots to an average height of 8 feet in the early sown plot and 5 ft. in the later sown plot. He intends to pull the plants and use them for about 10 acres. The early sown crop had flowered and the ryot intends to reserve a portion of the plot for seed for his next year's use. This crop has already served as an object lesson to some who have also sown daincha and we hope that next year a larger area will be under green manure crops in this village.

The fact that the ryot though illiterate is advocating the teachings of the department by example in his own village speaks very well of the Department. If we could find a handful of such ryots in similar localities where conditions are particularly favourable, the propaganda work of the department will be crowned with success at no distant date."

Plantain cultivation for leaves:—Plantain is generally cultivated for fruits. Its cultivation for leaves is seldom known. Between Tanjore and Tiruvadi a distance of 7 miles plantains are largely cultivated near Tirupanthurthi merely for leaves. Here plantains are planted 6 feet apart and will remain in the land

for about a year only. So an acre will plant about 1200 suckers. From a plantain and its side shoots, about 100 leaves are obtained in a year and also a bunch of fruits. Leaves cost annas twelve per 100 on an average, though the range is from 10 annas to Re. 1—8—0. A bunch of fruits will cost annas 4. So each plant gives an income of about one rupee. Deducting cost of cultivation, an acre of plantains intended for leaves gives a net income of Rs. 500 per acre. This system of cultivation is very profitable near towns.

In the second year, the land is prepared in the same way and suckers are planted 6 feet apart again for leaves. This one year cultivation of plantains for leaves may be profitably practised near towns. (A. S.)

Estate Notes.

The Students' club is entirely self supporting, and depends for its funds on the subscriptions of the students themselves, and other playing members, and the donations of well wishers. Donations will be thankfully received by the Secretary and will be acknowledged in the pages of this Journal.

Proposals are on foot to start a Students' Library and the matter is being investigated by a committee of students. It is hoped to get the assistance of the Govt. in the erection of a Combined Reading Room and Library. We shall make our needs known to our many friends and well wishers when the scheme is floated.

Officers' Club.—There were three conversazioni in the Officers' Club during the current month. One was by Mr. K. S. Vaidinatha Iyer, M. A. L. T., Principal of the Coimbatore College on Dr. Rabindranath Tagore's "Geethanjali." The talk, if not speech,

was a very interesting one and it brought home to the audience the greatness of the Doctor whose unique work "the Geethanjali" procured him the Nobel prize. Another was an interesting talk to which we were so kindly treated by Mr. Dawson of the Madras Forest College on "Theosophy." It was an instance in which a European gentleman was talking highly of Hindu religious principles to an appreciative audience mostly Hindus. The third was by Mr. M. R. Ramaswami Sivan on the various products of coal tar. He made this purely scientific subject an interesting and instructive talk showing samples of the various products and explaining their economic uses.

Students' Athletic Club.—A well contested Cricket match was played with the Stanes' European High School team in which the College players scored 80 runs against 76 of the Stanes' team.

A foot ball match was played with the Coimbatore College team, our team gaining 4 goals to nil. The return match ended in a draw.

A Hockey match with the Police Recruit School was played lately. In spite of the fact that some of the match players of the College were out in camp it was really creditable to the Athletic Club that the College gained 5 goals to nil.

The Annual report of the Union for 1914-15 and the list of Members corrected up to 5th July 1915 are printed as Appendices A and B respectively.

Departmental Notes.

The Director of Agriculture was in camp at the Agricultural College and Research Institute for a number of days from 30th July to 14th August '15. While here he inspected the various sec-

tions very minutely. The Commissioner of Agriculture also inspected the College and Research Institute on the 6th of August 1915 accompanied by the Director of Agriculture.

The Officers of the Mycology section who were engaged in spraying operations against the well known "Mahali" disease on areca nuts have all returned to Coimbatore as the work for the year is over. The damage done by the disease to the areca crop has been large indeed and the remedy quite effective.

Appointments.—Messrs. T. Budhavidaya Rao, K. Ramiah, K. Gopalakrishna Raju and Rajagopal Mal have been confirmed in their posts as Assistant Farm Managers from 5th August.

Mr. M. K. Nambiar, Assistant Farm Manager has been posted to Central Farm—to join at once. He has just finished the spraying operations against Mahali around Kumaranullur.

Mr. S. Pranatharthiharan, is appointed sub-protem Asst. Farm Manager vice Mr. C. S. Madiah, on other duty under the Court of Wards on Rs. 35-3-50 and is posted to Palur—to join at once.

Mr. K. Ramanuja Chari, Asst. Farm Manager is transferred from Samalkota to Central Farm, Coimbatore—to join immediately.

SHOW GARDEN ❀ PLANTS AND SEEDS

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