#### Notes.

Mr. Maxwell Lefroy has been appointed Imperial Silk Specialist.

We are extremely glad to note that Mr. D. Balakrishnamurthi Dip. Agri, one of resources and first grade Farm Manager, has been gazetted to act as Assistant Director of Agriculture, North Division. We wish him every success and confirmation in the appointment.

Molasses Road Making:—In Denmark, they have been trying out a Scheme of laying the dust by means of Molasses. By means of a mixture of water and Molasses—90 to 95% water and the rest Molasses—a fine road was made and made cheap. (Lousiana Planter). K. K. R.

Owing to the scarcity of potash occasioned by the war the value of seeweed as a potash manure may not be overlooked. All the kinds of seaweed useful as manure, grow attached to rocks or stones and are therefore absent from the sandy or muddy parts of the coast. They can, however, be induced to grow in such places by the provision of suitable stones to which the plants may anchor themselves. There are several places round the coast of Ireland where seaweed is cultivated in this way and suitable localities probably exist elsewhere where this practice might be extended with advantage.

Large stones are collected from the shore, taken out in boats at high tide, thrown overboard and subsequently, at low water arranged more or less regularly on the muddy or sandy bottom. The, stones, of course, are covered by the sea at each incoming tide and

they soon become coated with a growth of "Seedling" seaweed plants. (Journal of the Board of Agriculture). K. U. K. M.

Cane sugar v. s. Beet sugar:—"From sugar that is beet, I advise you to abstain. It is rightly so called being beat by the cane. But if you want sugar deliciously sweet, remember cane sugar can never be beat." (Lousiana planter). K. K. R.

At the instance of the Agricultural Department, a practice of growing Sunnhemp as a green manure crop for sugarcane has been established in the village of Agrahara Samakolam in Coimbatore Taluq, Coimbatore District during the past two years. The ryots now grow Sunnhemp, after the harvest of Ragi, in September without any irrigation, for about two months when the crop is removed and applied to the fields on which it is grown. The land is then flooded with water until the Sunnhemp green manure crop decomposes. The land becomes fit for ploughing in the dry in about 20 to 25 days. The field is ploughed a number of times during the subsequent months and an application of cattlemanure completes the preliminary preparation of the land for sugarcane planting in February. The lands being rich the Sunnhemp crop grows exceedingly well to a height of about 8' in a couple of months. The practice is extending year by year. The area of of this green manure crop in 1914-15 was about 30 acres while during the current year is over 50 acres. Thus the value of leaves as a manure for sugarcane is well understood. It is hoped that this practice which is an exceedingly good one will be adopted with great advantage by those who have not tried it yet in the District. W. R.

"The news wired by a New York correspondent a day or two ago that a planter has grown cotton ranging from white to deep olive green and that experiments are continued with a view to growing black cotton is regarded in Bombay as more than of passing interest. If it is pointed out by millowners experiment that growing black cotton is successful, it will have far reaching consequence as natural black cotton will replace black-dyed cotton. There is always a large demand for black-dyed cotton for manufacture of cloth and this black-dye is made in Germany who used to supply it to the world. If black cotton is successfully grown to any large extent it will produce a revolution in the economic aspect of the industry and make the world independent of German dye. Black cotton is not only used for working black cloth but for working strips and other patterns in a great variety of cloths." (Madras Times.) K. U. K. M.

We extract the following interesting information from the monthly report of the Deputy Director of Agriculture Northern Division, for October 1915.

"I visited Velangi (Godavari District) because I had heard that the whole village had transplanted their paddy crop according to our method but entirely of their own accord and was under the impression that one ryot had started a few years ago and that the others had followed. It was perfectly correct that the crops were all singly transplanted but on making enquiries as to when the practice had been started we were informed that it was about 60 years ago, long before the opening of the canal. The ryots informed us that their fathers had discovered that on the higher fields to which water had to be lifted, the crop was always better if the seedbed was sown thinly and the seedlings were good and that they adopted the practice throughout for both high and low lying fields. I see no reason to disbelieve their statement. It is another instance of the curious lack of interest in or absolute indifference to the methods adopted in another village, shown by the ryots of neighbouring villages."

The Assistant Director of Agriculture Central Division, writes as follows in his monthly report for October 1915.

"Another fact which attracted my attention this time was the method of using Varagu and other straw in paddy nurseries and in fields where sprouted paddy has been sown broadcast under puddle as a mulch. This system apparently checks the rise of salts in alkaline situations and hence used to a large extent. The very same day or the next day after the seeds are sown, the straw is spread on the surface of the land and this is repeated even after the crop sprouts up and it is not uncommon to note that within a month this process of mulching is done three times."

Feeding Experiments:—In feeding experiments with ten dairy cows, in which hay and wheat bran constituted the basal ration, and gluten feed and coconut meal the supplementary feeds, substantially the same results in milk yield and slightly more butterfat were obtained from the coconut meal than with the gluten feed ration. In amounts of 3 lbs to 4 lbs daily per head, coconut meal is considered to be a desirable dairy feed in Massachussets. (Experimental Station Record.) K. K. R.

The poisonous nature of castor oil seeds:—There is only one species of Ricinus plant known to Botany viz., Ricinus communis, but there are a number of varieties. All the varieties tested have proved poisonous, no matter what the size or colour of the seeds. The poison is contained in the shelled seeds and not in the shell, capsude, or oil extracted from the kernel. The substance containing the poison is known as ricin; it is not visible as such in the oil-free kernel; in quantity it forms only 1 per cent. of the dry, oil-extracted kernels. As, however, ricin exceeds strychnine or arsenic in intensity, small quantities only of ricinus seeds suffice to make a feeding stuff poisonous, a single gramme of the kernel

mixed with several litres of milk having proved sufficient to poison a calf. (Agricultural news). K. K. R.

We regret to record the untimely death of Mr. G. Kamakshi Row Nimbalkar, one of the members of our Union. He passed out of the Saidapet College about 18 years ago and owning much landed property in Uttamapalayam and Madura, settled as a private farmer for a number of years in the Madura District until, owing apparently to family considerations, he moved to Madras a few years ago and kept a Chemist and Druggist shop at Triplicane. When Periyar project brought water to the dry lands of Madura and Melur Talugs, rich and poor people rushed in to purchase lands at all costs. He then wrote largely to the English and Tamil newspapers in Madras and Madura about the methods of cultivation which could be safely and profitably followed in the new tract, besides giving personal agricultural advice to several. For a time he managed some of the private lands of the Zemindar of Vadagari (Hon'ble Dewan Bahadur V. Ramabhadra Naidu). He had come to the College Day in 1913 and wrote a highly commended essay on Paddy cultivation for the Munagala Prize in 1914. We extend our heartfelt condolence to his wife and children and to his father-in-law, Dr. M. C. Nanjunda Row of Mylapore.

M. R. R.

The Botanical Series Memoirs Vol. VII, No. 3 "On the inheritance of some characters in wheat" contains the following interesting information.

The crosses between Pusa 22 wheat, a fully bearded one and A 88, a good analyser, being absolutely beardless showed that two factors are involved in the development of beards (long awns) in Pusa 22 wheat. By a complete study of the third and subsequent generation plants, the two constituents of the fully bearded character of Pusa 22 wheat were isolated into long and short

tipped ones, and Mrs. and Mr. Howard were able to recombine the constituents, long tips and short tips, and produce the fully bearded character of Pusa 22. Similarly by combining Pusa 6, which appeared to carry the long tipped factor and Pusa 7 the short tipped factor, the fully bearded character of Pusa 22 was produced. Such isolation and recombination of factors are extremely interesting from a scientific point, and the authors are of opinion that there is economic significance as well by such studies. K. C. J.

"Agriculture is at once an art, a science and a business; the researches of naturalists, chemists, geologists and mechanicians are daily contributing to the elucidation of its principles and the guidance of its practice; while its pursuits afford scope for the acutest minds they are relished by the most cultivated. As a business it shares to the full in the effects of that vehement competition which is experienced in every other branch of industry and has besides many risks peculiar to itself. The easy routine of the olden time is gone for ever; and without a good measure of tact, energy, industry no man can now obtain a livelihood by farming. It is desirable that all this should be known, as nothing has been more common than for parents who have sons too dull to be scholars or too indolent for trade to put them to farming; or for persons who have earned a competency in some other calling to covet the (supposed) easy life of a farmer and find it to their sorrow a harassing and ill requited one."

(Encyclopedia Brittanica).

We would draw the attention of our readers to leaflet No. 5 of 1915 of the Department of Agriculture, Madras, by the Director. It has a short interesting note on and a fine coloured illustration of 'Water Hyacinth' (Eichhornia speciosa, Kunth) a pestilential weed of Tropical America. The plant is said to be seen now in various parts of this Presidency? It can be easily recognised by its pretty mauve flowers and green thick fleshy leaves with bladder like swollen

stalks. It grows rapidly in wells, ponds, rivers, channels and in fact in any stationary or slow moving fresh water. Its dense vegetation seriously impedes the flow of water and even blocks up small ponds. In parts of America it has spread so badly as to obstruct navigation in some of the rivers and to necessitate an expenditure of several thousands of pounds to eradicate it. It is beginning to give trouble in Burma as in Australia and is just appearing in Bengal. It occurs in Madras near the Adyar, between Chingleput and Conjeveram and in the irrigation channels in the neighbourhood of Chidambaram and Mayaveram and in many places in the Malabar District. If it is allowed to grow unchecked it is feared it may grievously affect our water and irrigation supply. Its dense vegetation in Chingleput has been found to make an ideal breeding place for musquitoes. Under these circumstances this leaflet of our Director appears as a timely note of warning requesting all gentlemen to assist in eradicating this weed which can be done by uprooting it and burning in the early stages of growth.

### Estate Notes.

Mr. W. H. Harrison's research work at Coimbatore on the chemical and bacteriological changes taking place in paddy soils has been accepted by the University of Manchester as of sufficient merit to enable that University to confer on him the degree of D. Sc. We heartily congratulate Dr. Harrison on his well merited distinction.

Mr. S. E B. Stevenson, c. I. E., retired Deputy Inspector General of Police from Salem and the Hon'ble Mr. E. F. Barber Hon. Visitor from Ootacamund, visited the College and the Farm early last month and this month, respectively.

Students of all the three classes of the College were examined by the Deputy Directors of Agriculture, Northern and Southern Divisions, in practical Agriculture, from the 6th to 11th insant. Old students of the College will probably miss the Mahagony trees which once occupied the Lawley Road. Although great pains were taken to start them, they had never done well and it was decided to remove them sometime ago. Since then some of them seemed to have made special efforts to pull themselves up, but alas,! there was none to intercede on their behalf to spare them yet another year. The axe has now been laid at their roots, but there is no doubt that their removal has improved the Lawley Road considerably, the ill kept cactus has gone, the road is appreciably widened and the rain trees are showing themselves to advantage.

Of the many activities of the Farm Poultry keeping is of the most recent. Grading of country hens with Leghorns is being done systematically and there is quite a large brood of them. The Leghorns are pre-eminently suited for egglaying. Ducks and Turkeys have been added. They will play ducks and drakes with the grain in the threshing floor, specially during the paddy harvest.

## Departmental Notes.

In G. O. No. 2656 dated 30th November 1915, the Government having sanctioned another Assistant Director of Agriculture the following will be the Agricultural charges in the Presidency.

# Assistant Director of Agriculture Northern Division :-

With headquarters at Anakapalle in charge of Ganjam Vizagapatam and Godaveri Districts including the 2 Farms Anakapalle and Samalkota and the Supervision of Parlakimidi.

### Deputy Director of Agriculture, Northern Division :-

With headquarters at Bellary in direct charge of Kistna, Guntur, Kurnool, Bellary, Anantapur, Cuddapah and Nellore Districts including the three Farms Hagari, Nandyal and Sirvel.

## Assistant Director of Agriculture, Central Division:-

With headquarters at St. Thomas Mount in direct charge of Chingleput, South Arcot, North Arcot and Chittoor Districts including the Farm Palur.

## Deputy Director of Agriculture, Southern Division:-

With headquarters at *Trichinopoly* will be in special charge of Tanjore, Madura, Ramnad and Tinnevelly Districts including the Agricultural Stations of Manganallur and Koilpatti.

### Assistant Director of Agriculture, Southern Division:-

With headquarters at *Trichinopoly* will be in charge of Trichinopoly, Salem, Coimbatore, Malabar and South Canara including the Taliparamba Agricultural Station.

Appointments etc.,—Mr. D. Balakrishna Murthi Dip. Agri. Farm Manager First grade, has been appointed to act as Assistant Director of Agricultur N. Division.

Mr. K. Ramasastrulu Naidu B. S. Assistant Director of Agriculture, N. Division, is transferred as Assistant Director of Agriculture, S. Division.

Mr. K. Narayana Iyengar Dip: Agri: to take charge of Anakapalle Agricultural Station.

Mr. T. V. Rajagopalachari Dip: Agri: to take charge of Hagari Agricultural Station.

Mr. V. S. Ramaswami Aiyar, Dip. Agri. to take charge of Sirvel.