

6. It was found in parts of Tekkali taluk that the Red Hairy Caterpillar (*Amsacta albistriga*) establishes itself as a sort of indigenous pest on some of the mountain sides with *Canthium paraviflorum* (Tel.:— Balusu) shrubs as host, but its presence is not felt in the neighbouring cultivated dry areas since these areas support only ragi crop, the planting of which commences after the hairy caterpillars are full grown and about to pupate. Thus agriculture and pest in these areas have mutual adjustment without any positive interference with one another and is worth copying in other places with similar conditions.

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ABSTRACTS

The Indian Coffee Cess Committee. Under the Indian Coffee Cess Act No. XIV of 1935 has been created a fund derived from the levy of a customs duty of 8 annas per cwt. on all coffee produced in India and taken by sea or by land to any place beyond the limits of British India or Burma. During the year the cess receipts which amounted to over a lakh were actually far more than the estimated amount which was only about Rs. 85,000 per annum. The coffee cess committee is so constituted that the three main interests, the grower, the trader and agricultural expert are directly represented in it. It is composed of a representative from each of the local departments of agriculture of Mysore, Travancore and Cochin, a representative for each of the curing, manufacturing and shipping interests, and eleven representatives for coffee growers, of whom Mysore being the premier coffee growing area, has been given the right to send three. In addition, the Imperial Council of Agricultural Research sends a representative to the Committee.

The activities of the committee have been directed along many lines; a coffee marketing survey to collect data relating to the transport, sale, consumption etc. of coffee, the establishment in co-operation with the High Commissioner of an Indian coffee market Expansion Board in London, with the main object of explaining the possibilities of expanding the market for Indian coffee in the United Kingdom and on the Continent, and the launching of a 'Drink Indian coffee' campaign in India itself, are the outstanding achievements of the committee. The last mentioned campaign has included many methods of coffee publicity propaganda, like the employment of attractively dressed waiters to serve coffee in coffee houses, the display of posters and menu cards, the pressing into service of cinemas and newspapers; and for the future is programmed even a demonstration truck.

The committee has also paid attention to the question of adulteration of coffee and have besides made a strong representation to the Government that preference granted to Indian coffee in the United Kingdom be increased from 1 d. to 3 d. per lb.

The committee have opened a Central Information Bureau at Bombay and serious attempts are being made to collect all available data and statistics on the subject.

(Summarised from a leaflet No. 1, October 1936 of the Indian coffee cess committee).

M. R. B.

The absorption of nutrients by two varieties of wheat grown on the black and gray soils of Alberta. By E. K. Woodford and A. G. McCalla. Chemical analyses carried out at five stages of development of Reward and Red Bobs wheat grown on the black and the gray soils of Alberta showed that differences in soil and variety significantly influenced the composition of the plants.

The weights of dry matter and all nutrients studied were higher for the black soil plants.

On the basis of percentage of dry matter, all nutrients, except phosphorus, were higher in the black-soil plants. Reward was higher than Red Bobs in nitrogen when grown on the black soil; and in ash, phosphorus and potassium when grown on the gray soil.

The grain of gray-soil plants was higher in all ash constituents but lower in nitrogen. Varietal differences were more marked in the grain and straw of the mature plants, Reward grain grown on both soils being higher in nitrogen, ash, phosphorus and magnesium.

The total weights percentages, rates of absorption and ion ratios all indicated that nitrogen and sulphur were limiting the growth of wheat on the gray soil. It is suggested that the proportionately higher absorption of phosphorus from the soil was in compensation for the low availability of nitrogen and sulphur.

The differences in original quality of the wheats grown on the two soils can be largely accounted for by the differences in protein content, and therefore nitrogen supply. Phosphorus absorption, nitrogen, phosphorus and sulphur balance, and the relation of ash to protein, are possibly important in determining the keeping properties of the flour.

Author's abstract.

[Possibly such differences in the composition are responsible for the smaller damage done by the insects to the trees on the black soils. —Ed.]

Gleanings.

Potatoes: Acceleration of Sprouting. Farmers who grow potatoes under irrigation for the early market during the winter often have difficulty in securing sprouted "seed" for planting or inducing their own "seed" to sprout sufficiently early. Some growers of main crop potatoes, too, who prefer to use "seed" grown under irrigation in winter have a similar difficulty. A solution of this problem has been tested at the Agricultural Experimental Station, Salisbury, during experiments on fumigating potatoes with carbon bisulphide to kill "tuber moth".

The tubers should be placed in an air tight room or receptacle, such as a corrugated iron tank. A pit in the ground covered with a tarpaulin has not proved satisfactory, probably owing to the vapour being absorbed by the earth. On the otherhand a tarpaulin covering to an iron tank would be satisfactory, since the vapour is 2.6 times heavier than air, and so will not tend to rise and find its way through the tarpaulin.

Carbon bisulphide should be placed in shallow trays or dishes on the top of the "seed" tubers and the room or receptacle closed. The liquid evaporates readily on a warm day and the vapour being heavier than air, flows over the sides of the trays and fills the receptacle. It is advisable to commence the treatment on a warm morning, so that the liquid will evaporate rapidly. The tubers should undergo the treatment for 24 to 48 hours, and two tablespoonfuls of the carbon bisulphide are required to each cubic yard, or 27 cubic feet of volume of the receptacle, irrespective of whether the latter is filled with tubers or only partly so. Within ten days about 75 % of the "seed" would be commencing to sprout. When sprouting has commenced, it may be further accelerated by placing the tubers in a gently warmed tobacco barn or in a warm room, in which the air is kept reasonably moist. It is useful to know that carbon bisulphide is sold by the pound weight. One pound is equivalent to approximately 13 ounces (liquid measure) or 26 tablespoonfuls. *Rhodesia Agricultural Journal* Vol. 33 pp. 378.