

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.

Review.

The Bulletin of the Imperial Institute, London, has now been enlarged to give a more complete reflection of the various activities of the Institute. The Bulletin contains interesting results of laboratory investigations as well as useful articles and notes on plant and animal products, and on ores and minerals. The last two issues contain, among many others, notes on drying of hides and skins; improvement in the quality of ghee; cultivation of Tung oil tree; Cacao fermentation; weed-killers; cultivation of lemon-grass and distillation of its oil; colouration of glass by mineral compounds; mineral resources of Johore, British Somaliland and Abyssinia; Empire nickel developments; the Dead Sea potash industry; and magnesium compounds from sea water. The Institute is to be congratulated on the reduction of the price of the Bulletin, which it has been able to make in spite of the extended scope of its contents.

J. S. P.

Crop & Trade Reports.

Receipt of raw cotton at Press and Spinning Mills.

		Total cotton pressed and unpressed.		Figures for corresponding period in previous years.
		Bales of 400 lbs. against an estimate of 540,700 bales for 1935-36.		
1-2-36 to 16-10-36		557,708		411,591
" 23-10-36		563,572		415,926
" 30-10-36		570,480		420,325
" 6-11-36		574,397		423,826
" 13-11-36		582,532		428,217
		Cotton bales received at mills.	Export by sea.	Import by sea.
1-2-36 to 16-10-36		335,774	220,362	94,628
" 23-10-36		341,555	223,869	94,743
" 30-10-36		350,000	230,043	94,949
" 6-11-36		354,780	232,503	95,451
" 13-11-36		361,259	236,456	95,511

Cotton—Intermediate Report 1936-37. In parts of the Central districts and the South, the sowings of cotton are still in progress. The area under the crop is expected to be normal. The condition of the young crop is generally fair.

2. In the Deccan, the sowings of *hingari* or late cotton have concluded and are expected to be above normal in the districts of Bellary and Anantapur on account of the failure of rains in the mungari season and the consequent restricted sowings. The yield from mungari or early cotton is expected to be generally below normal. In parts of Guntur, the Cocanadas, cotton has been affected by the cyclone on the 28th October 1936.

3. The local cotton trade is not generally active at this time of the year. The wholesale price of cotton lint per imperial maund of 82-2/7 lb. as reported. from important markets towards the close of October 1936 was Rs. 19-9-0 for Cocanada, Rs. 25-11-9 for Red Northerns, Rs. 18-11-0 for Westerns. Rs. 24-14-0 for Cambodia, Rs. 24-5-0 for Coimbatore Karunganni, Rs. 23-2-0 for Tinnevely Karunganni, Rs. 22-4-0 for Tinnevellies and Rs. 21-4-0 for Nadam cotton. As compared with the prices in the previous month, the prices of Red Northerns reveal a rise of about 9 per cent. while those of the other varieties are practically stationary.