

ORGANICS *VERSUS* INORGANIC MANURES OR COMPOST *VERSUS* ARTIFICIAL MANURES

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THERE has been so much of loose talk on the alleged harmful effects of using inorganic manures (in contrast to "Organics") on both the crop and soil that it is necessary to draw the attention of our readers to this subject.

There is a considerable amount of popular misconception and futile controversy on the subject of "organics" *versus* "inorganics." In the course of our advisory duties it is of the greatest importance to place before estate owners and Superintendents a balanced view on this subject. This is often a controversy that we are dragged into, although there is no controversy at all.

The following points should therefore be noted in particular : (a) The so-called "organics" used in coconut manure mixtures in the old days such as Groundnut Cake, Castor Cake, fish meal, blood meal, nitrify in the soil in a way very similar to sulphate of ammonia or calcium cyanamide. The nitrogen is finally converted to nitrates and taken up by the plant in that form. Maximum nitrification occurs in both types of manures up to six weeks as shown by the studies of Joachim at Peradeniya, so that one cannot classify them into "slow acting" and "quick acting" manures, the latter being exhausted, prematurely.

In fact, in the N.P.K. manurial experiment at Bandirippuwa which has been continued for the last 17 years, there is a comparison of N-quality, *i.e.*, cyanamide, sulphate of ammonia and Groundnut Cake. After 16 years there are hardly any difference worth recording. These small quantities of "organics," 6 to 7 lbs. in a mixture of the old type (the 16 lbs. mixtures) cannot improve the physical texture or moisture-holding capacity. At the rate of 70 palms per acre this means only about 400 lbs. added to 2 million lbs. of top soil. On the other hand, bulky organic manures such as farmyard manures, green manures, or grass and pastures (leys) ploughed into the soil at the time of manuring add 4 to 6 tons per acre.

Composting of waste products, green manures, or cover crops is not at all necessary on a coconut estate. In the usual process of cattle manuring, such materials may be added to the manure circle forming a "miniature compost factory" at the base of the palms. The fantastic claims made by Howard and his school have no scientific basis.

In connection with this subject the letter in the Post Bag, and the two Reviews of Howard's book on "Farming and Gardening for Health and Disease" should be carefully read. These give a balanced view of the subject. It should be realised that in our propaganda efforts to increase production and yield of coconuts in Ceylon, while the use of cattle manure and locally available

manures should be encouraged (*vide* C.R.I. Leaflet No. 9—Locally available materials of manurial value), the imperative necessity of using artificial manures, as well as the lack of alleged harmful effects, should be kept in mind and stressed.

Once and for all it should be stated that compost is not the panacea of all ills of agriculture that Sir Albert Howard claims it to be.

AGRICULTURE

By C. S. ORWIN

(From the "Manchester Guardian")

THE controversy over the use of artificial manures continues, if indeed it can be called a controversy in which all the propaganda emanates on one side.

"If Sir Albert Howard and his friends would be content to urge the importance of maintaining the humus contents of the soil and of increasing it whenever possible, they would have the support of every modern farmer and agricultural chemist. But when they go further to assert that the artificial fertilisers, so-called, are injurious to the soil, to the crops it grows and to the men and animals supported by these crops, why then they are suggesting, in effect, that all the knowledge of the feeding of crops and stock made available to us by a succession of great men, from Lawes and Liebig a hundred years ago right up to the present day, has been founded in error. This is a serious charge, which calls for far more evidence than they have adduced so far if it is to be sustained. In his latest book, *Farming and Gardening for Health and Disease* (Faber, pp. 288, 12s. 6d.), Sir Albert Howard returns to the charge, and still without providing the necessary proofs. Indeed, it is the practice of the exponents of his theories to demand that the State should institute experiments to test them. This, surely, is putting the cart before the horse. Until they themselves can establish their case against the application of modern science to crop production, farmers are not likely to be deterred from using its products to increase the capacity of their soils for food production."

"COMPOST AND DISEASE"

(Extract from the "Tropical Agriculturist," Vol. XXIII. No. 2)

NOTHING is to be gained by treating composting as a universal panacea. The enthusiasts who support their propaganda for some special ritual, by attacking the use of fertilisers, would be doing a great disservice to our present food production programme, if, in fact, notice were taken of them outside the popular press. I do not think that anything can usefully be said on present evidence about those hypothetical ingredients of compost which have been said to confer perfect health and immunity from all diseases on plants, animals and man.

"Had Sir Albert been content to point out, in a semi-popular book of this nature, the proved value of sound agricultural methods, involving the return to the soil, as compost, of valuable plant and animal wastes, the work would have proved most valuable. Unfortunately, he has seen fit to obscure his main theme by unsound generalisations and extravagant claims. The book is written in a somewhat journalistic style with a tendency to tedious repetition (the reader may become rather tired of "the earth's green carpet") but if critically read will provide ample food for thought."

R. E. D. BAKER.