

DISCUSSION

Chairman :

The meeting is open for discussion.

Prof. Stephanson :

The question I have is on the matter of storage and it is really somewhat connected with the first paper. In your paper you mentioned the tremendous loss or some losses during storage due to evaporation and also some high temperatures. I would gather that if this yam could be kept at a lower temperature in a condition where it would not lose its moisture it may result in a higher quality. Is this true?

Dr. Coursey :

The high temperatures which I have mentioned were recorded in West Africa in conventional type of driers which consists mainly of hanging the yams up on an open wooden framework. There is certainly little doubt that if the yam can be conserved at lower temperatures both the loss of water and the respirational losses of dry matter could be reduced. This is one of the things on which I am working at the moment. I might mention that it is a strong condition in West Africa in the yam growing areas, that yam in store should be shaded from the sun, and this yields very strong results.

Prof. Stephanson :

Has this ever been tried to use a spray cooler to increase the humidity of the air and lower the temperature and blow this through the stored yam?

Dr. Coursey :

This has never been tried as far as I am aware. It certainly might be worth trying but one of the troubles of course is, can material which is only carbohydrate bear the costs of expensive and sophisticated storage techniques?

Prof. Stephanson :

This would require a fan of some kind to move the air but the spray cooling would be done very easily.

Dr. Coursey :

Yes.

Dr. Iton :

Mr. Chairman, in your opening remarks you said that we, as scientists, could dream and build what we like, but sooner or later we have to come to reality and the practical problems. Both yesterday afternoon and this afternoon I heard speakers referring to the tendency on the part of people who live away from their original homes to persist in buying imported food. And one of the root crops which certainly comes into this category is the Irish potato. Some people said it has no value; maybe it does. I think that here we have to grapple with a really serious economic problem. I should say it has exercised my mind, privately, as to whether all this talk we are having about increased food crop production in the tropics is as sound as it appears to be. I often wonder if we would not do better to expend less money in buying things like Irish potatoes and things which don't spoil which cost less on the market here than most of our locally produced root crops.

I make this comment in view of the original comment you made and the statement made by Dr. Coursey, that some people will continue to pay exorbitant prices for imported foods. We must bear in mind that these foods are not always more expensive than locally produced ones.

Dr. Coursey :

My feelings about the shipment of yams from one country to another are rather stimulated perhaps by the absurd situation I observed in West Africa of ships coming

out bringing potatoes for Europeans living in West Africa and going back with yams for West Africans living in Europe. Well, I cannot help feeling that either this is a very exceptional substitute for the other.

Dr. Maner :

I think that what is being discussed here, is also true with many other root crops in other areas of the world. But isn't this true that it is not because it cannot be produced more economically, but it is because of agronomic practices that are presently being employed, does not allow for a more economic production and therefore it has to be sold at a higher price. I know that in Colombia such exists with cassava, which we refer to as yuca, because on the market yuca is very expensive. It is not because yuca is so difficult to grow, but because it is consumed only by a very few people basically and its supply is expensive and the market is limited. There are I think if we can increase the demand for yuca (cassava) — I think if we can increase the production and utilise it in other things, then the price of these root crops will be lowered, much lower than we can bring in food from outside.

Chairman :

Are there any more economical questions? We can delay them until later.

Dr. Martin :

It is a common practice among native people to store some of their root crops in the soil mainly by not harvesting them and as the yams come into maturity at the beginning of the dry season, it may be that conditions in the soil are particularly favourable for storage over a period of time — 2 or 3 months' time. Have you got any idea what happens to the yam under such conditions and perhaps if the yams do not deteriorate so rapidly in the soil, then by studying the natural storage in the soil we can learn a little bit more about storage conditions.

Dr. Coursey :

From a scientific point of view, it will be most interesting to investigate this type of storage practice. This practice is followed to some extent in most parts of West Africa. I have the impression that very serious deterioration of yams in the soil takes place, but what perhaps is more important is the great danger of surreptitious harvesting, shall we say, or even another kind of storage pest — harvesting by monkeys, which is not unknown in some areas and also I think the human race is a more serious pest than the monkey; but both can be quite severe and this practice, though it is still adopted, is certainly tending to decline in favour of hanging in racks in the open under shade. It certainly is a scientific point of view.