OF THE PHYTOTRON AT C.S.I.R.O., CANBERRA, A.C.T.

ON 29TH AUGUST, 1962

Sir, Your Excellencies, and Ladies and Gentlemen:

I have been very much struck today by the profound difference there is between politics and agricultural biology. You have just had it explained to you, those who are not already expert, that what is to be done in this place is to control the environment. In politics, it's the other way round. Thus today I've been down freezing at the airport saying goodbye to the King and Queen of Thailand, and acting, as nature has equipped me to do, as a windbreak for the Queen, with the wind blowing practically at freezing point. And here I am this afternoon being gently cooked, feeling all the germs that I acquired in the wind this morning getting on nicely, being encouraged, being cultivated inside me.

Now there is one other thing that I would like to tell you about the phytotron - and I hope this won't go any further - I beg of you to keep this dark. When C.S.I.R.O. first of all decided that a request ought to be made to the Government to find the money for a phytotron, the proposal fell into the hands of a relatively junior officer in my department who read it, and in all good faith, scribbled out a note saying, "This is monsense. Oliphant already has a cyclotron, why do we have this overlapping and duplication?" Now that's not a - it's a true story, but it's a good story because it exhibits something that people don't always understand the astuteness of the civil service to avoid overlapping and waste. Thus "cocking a snoot" at Parkinson's Law with a vengeance. Well, Sir, you came along - or somebody came along - and explained to me what a phytotron was and I must confess that from that moment I found myself vastly interested in it. The idea of taking what has been in the past field work in remote places conducted under great difficulty and concentrating it in point of time and space - that seemed to me, even to my ignorant lay mind, a dramatic thing, the value of which I thought quite obvious.

It isn't always easy to resist the C.S.I.R.O. though it thinks we resist it too much. Sir Frederick White referred to his great predecessor, Ian Clunies Ross. I always thought of him not purely just as a scientist in himself, though he was, but as the greatest public relations man for science that this country has ever had -a phenomenal genius for not sparing himself, for going out day after day, week after week, making other people understand the importance of the work that's being done in scientific research and, of course, in particular by C.S.I.R.O. I suppose that if we were to ask ourselves what in the last twenty years, up to fifty years, had been the great distinguishing feature of this century, apart from wars and political confusions, the answer would be the flowering of science and the growing application of science to technology, to the problems, the practical word-a-day problems, of the world.

And I'm perfectly certain that this is, in particular, true of agricultural scientific work. Each time we open a report by a statistician or by a demographer and we are told how rapidly the population of the world will double and how rapidly it will treble, we would need to be very insensitive to the problems of life if we weren't almost appalled by the idea that the same earth will have to sustain so many more thousands of millions of people. And it will sustain them

caly if, literally, the earth is encouraged to bring out its harvest. And in this field of scientific investigation, I think we see one of the great hopes of the future of mankind, ne of the great hopes of future peace, oddly enough, because in a starving world there will always be war. And the great hope of peace with a growing population in the world is that men of devotion and women of devotion and distinction should give their talents to the kind of investigation that will be conducted here.

Now it isn't always easy, is it, to make people understand how important that is. We're a bit given to taking things for granted. We ought to be able to bring up, not a few hundred people, but a few scores of thousands of people to have a look at this and see what is in the wind, see what is going on, see what the great objectives are, because then I think we would have a more understanding and encouraging public.

But there's another aspect of that which I want to mention to you. We are in Australia - I speak only for Australians here this afternoon - we are not a cynical race because cynicism is "well, what's the use?". But we are a sceptical race. We need to have it proved - "Show me, show me about this." I can remember, and I've said this before, I think in the presence of Dr. Dickson, I can remember a time when I was a small boy in the country, when the agricultural scientist put himself to the trouble of going up into the wheat country where I was born to try to explain to a collection of wheat farmers that a mystericus subject called superphosphate, if applied to that light sandy loam in that part of the country, would bring about an enormous increase in productivity. And you know, I could just almost hear what was going on in their minds - "Oh, I don't know, what does it cost?" So and so - "Oh well, I don't know, the old man didn't use it", "Oh well", you see, and in the end about three reasonably enlightened farmers decided that they would give it a go.

I think from the long memory of it that they were told at that time in this particular soil that they ought to use a hundredweight of super to the acre. And these three decided that they would try it out rather tentatively with half a hundredweight. And when they got another three bushels to the acre as compared with their neighbours, then a few more people came to the conclusion that it was pretty good. You see, this is not a cynical attitude of mind but it's a sceptical attitude of mind and if I were asked to say, to name one defect in our present technological equipment in these areas, I would say it is that there is too great a gap in point of time and in point of space between the work done in a place like this and the work done on the farm and sheep station. In other words, we are, so far in Australia, rather failing on the extension of the results of research to the man on the farm.

This requires, of course, a great deal of co-operation between Commonwealth and States - we have divided authorities on it - but it also requires in the farmer himself a realization that he will not get the benefit of these investigations until he is not only interested but enthusiastic and keen and demanding about getting it brought to him and his farm. And I know, Sir, that you, because you've spoken many times to me about this, that you would regard it as a state almost of paradise, if the work done, the magnificent work done by C.S.I.R.O., found its way out quite quickly, quite effectively

to the people who are engaged in production, because there is no doubt about it, all the old ideas have gone. Going back to that remote period when I was a boy myself, Australia was a desert, it had a few sketchy bits of cultivable land around the margins, it had some areas where the rain fell agreeably. But oh, it could never sustain a population of more than ten millions. And then some bold fellow said, oh no, twenty, twenty some day, not this century, of course, but some time in the future - twenty.

Now we are casting loose from all those silly prejudiced ideas and if we are now discovering that the same area of land, and of course it's been enormously extended, that the same area of land, with the benefits of scientific research brought to it, can produce twice as much, three times as much, four times as much as it did, then we're ourselves making a contribution to the sustenance of an enormous, relatively enormous population in our own country and also making available for developing countries, which have much more acute problems of population and feeding, the results of the work that will be done here.

So, Sir, I say that I'm grateful to you for allowing me to come along here and have the pleasure of saying a few very inadequate words on what I helieve to be one of the exciting occasions in applied science in the history of our country. Sir, I declare the phytotron, the controlled environment - the CERES I'll call it - I'm told now for short - Whatever you call it, I declare it open.