

# University Report

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NARRATOR -  
JOHN JONES:

This week a new drug for abortion - or so the Uganda Press would have us believe. Professor Sultan Karim of Makerere talks to University Report about this discovery and the morality of it all. But we start with a report of the 4th Annual Conference of the Entomological Society of Nigeria.

The Entomological Society of Nigeria was started in 1967 and is the only national forum where entomologists and those interested in insects and their control can meet and discuss their work. The 4th. Annual Conference of the Society was held at the Ahmadu Bello University, Zaria, from 7th. to 9th. September. Some 40 delegates came from Nigeria and other West African countries.

Insects do not make distinctions between scientific disciplines, because the problems they raise cover a wide range: the agriculturist has to face the damage done to the crops growing in the field: the engineer has to design insect-proof stores where produce can be kept without being attacked; the medical officer of health and the veterinarian combat insect-borne diseases of man and his livestock. All these interests were represented at this conference. Here is Robin Story to report.

ROBIN STORY:

The Conference was opened by the Alliaji Hammed Dammalam, the North Central State Commissioner for Natural Resources and Co-operatives. In his address to the delegates, he estimated that each year in Nigeria at least a hundred million pounds worth of damage was done to crops by insects. More subtle damage was done to the economy by insects that transmitted diseases. Every day in Nigeria, the Commissioner said, thousands of people feel too ill to go to work because of diseases carried by insects. This is a colossal waste of valuable man power that our Nation cannot afford. Finally the Commissioner noted how few Entomologists there were in Nigeria to deal with the problems he had outlined. He appealed for more Nigerians to undertake this vital work.

A symposium on the strategy of control of insect pests in Nigeria began with a paper by Professor T. Ajebola Taylor, Dean of the Faculty of Agriculture at the University of Ibadan, and current President of the Society. Because the natural environment was delicately balanced it was dangerous for Entomologists to regard the control of insects as an isolated problem. Research, and its practical application should only be done in close co-operation with other scientists studying the environment i.e. using a fully integrated approach. For example, entomologists must work with plant breeders, who are aiming to develop insect resistant varieties of crops. An integrated approach, said Professor Taylor, included man himself as a factor of the environment, and in Nigeria one of the main obstacles to integrated control of insect pests on farmer's crops was the present system of peasant agriculture itself.

Medical Entomology was covered by Dr. R.E. Fontaine of the Research Centre, Kaduna, Nigeria, which is sponsored by the World Health Organisation. He re-echoed the concern of the Commissioner over the lack of research being done into the insect vectors of endemic diseases that cause so much suffering. The more important of these diseases in Nigeria were malaria, yellow fever, river blindness, filaria, and sleeping sickness. Dr. Fontaine pleaded for more research into methods of controlling these vectors, other than by using persistent insecticides.

This point was taken up by speakers from the Institute for Agricultural Research of the Ahmadu Bello University. Mr. Hayward dealt with some disturbing implications of his work on the control of cotton pests, and pointed out that a research station, because of the special treatments carried out there, soon became an ecological island, quite unlike the environment which it was intended to serve. Mr. Caswell from the same Institute tried to clear the subject of pollution of its emotional overtones, and to see what proven scientific evidence there was for banning persistent pesticides such as D.D.T. in Nigeria. This same subject was the theme of Professor Taylor's Presidential address, which he entitled "The Future of Chemical Control of Insects in Nigeria". After summarising the use of pesticides in Nigeria since the revolution that D.D.T. and B.H.C. had brought about in the late 1940's, he weighed up the advantages of D.D.T. as well as the risks of using it. He too, deplored the present emotional wave against D.D.T. in developed countries, which he called "The Sophisticated Hysteria of the Affluent". Chemicals will increasingly play a major and significant role in food production and human welfare in Nigeria, said Professor Taylor, and Nigeria should be cautious about what chemicals it bans and what it embraces.

After a series of progress reports from research entomologists, the Conference passed a number of resolutions. The first was about the continued use of D.D.T. in Nigeria. The Society felt that no steps should be taken to ban these pesticides unless there was proven evidence of a real danger to man, and until equally efficient alternatives were available.

Next the Federal Government was called upon to publish a Central list of sound recommendations for pest control, to test equipment for applying pesticides, and to set up a Toxicological Laboratory for determining pesticide residues in crops. The Entomological Society also wanted more research to be done into the insect vectors of human and livestock diseases, and for more Nigerians to come forward to be entomologists. As I left the Conference I felt that the insects were in for a tough time.

JOHN JONES:

Robin Story reporting from Ahmadu Bello University on the 4th. Annual Conference of the Entomological Society of Nigeria.

Over now to Makerere University. It's over a year since we last spoke to Professor Sultan Karim of Makerere University about his discovery of the hormone like substance PROSTAGLANDIN F2 ALPHA that appears in the maternal blood stream, and which was then being used on a limited experimental scale to induce childbirth. Since then Professor Karim has been appointed Head of the Department of Pharmacology and Therapeutics at Makerere.

Professor Karim tells us that over six years of intensive research has gone into the preparation of this drug and that it has proved itself to be especially useful in cases of maternal illnesses

such as diabetis and high blood pressure where it is necessary to bring out the baby alive before the natural process does this.

Well, in Kampala in a discussion with our correspondent there, Elizabeth Keeble, Professor Karim brings us up to date on his discovery, discusses some of its implications and also reflects on the morality of the situation.

PROFESSOR KARIM: This particular thing, the use of these substances PROSTAGLANDINS in bringing about childbirth, the main aim being to bring out the baby live and safe, this particular use has been well established and at Mulago Hospital we have used this drug in more than 500 women. It is no longer at an experimental stage and it is accepted by all doctors, all gynaecologists at Mulago as a great improvement, in fact some people describe it as a major breakthrough in this particular area. Now coming to the problem of abortion, the process of childbirth at nine months, or around nine months, and the process of abortion, they are very similar. In both cases the uterus has to contract before the foetus, whether it be live at term, or the foetus before term, is expelled. Now we have been interested in seeing if we can use this drug to bring about abortion in a different manner - abortion without surgery. In other words bringing about childbirth earlier on during pregnancy, before the foetus becomes viable. Now, from these studies we've found that this drug can be used to bring about abortion in early pregnancy, and it has been used by us, and now by others, for this particular purpose.

ELIZABETH KEEBLE: That would be in the case of a woman whose life would be endangered in some way, or the foetus is not properly formed or something like that.

PROFESSOR KARIM: Right. Now, the extent of the use depends very much on the laws of the particular country. Now, if this drug was used in some States of the United States of America, like New York State, where they have very liberal abortion laws, then it could be used for anybody who needed an abortion. Here in Uganda our abortion laws are very strict. Abortion is only permitted in cases where the life of the mother is in danger, so we are restricted in using this particular drug for these sort of cases.

ELIZABETH KEEBLE: And in England the law has just been changed.

PROFESSOR KARIM: Right.

ELIZABETH KEEBLE: The laws have been changed in England, and you say it varies from State to State in America, and they're very strict here, how do you feel yourself about changes in law regarding abortion.

PROFESSOR KARIM: Yes, I think this is happening universally. Most countries are going through the process of changing their abortion laws. My personal views on this are very simple. I've stated this before and I would like to state them again, and that is that whether the woman has an abortion or not, is for her and her alone to decide. Once the woman has decided she wants an abortion then the law should be such that it should permit this particular decision of the woman.

ELIZABETH KEEBLE: How do you think that your particular discovery, this drug, will help in implementing changed abortion laws.

PROFESSOR KARIM: If, with this drug we don't run into any problems as happens with many drugs, initial results are very encouraging, it turns out that with use over a

longer period, or in a larger population, some disadvantages, side effects are discovered. Now, so far we have found this drug to be extremely safe. If this proves to be the case, then this promises to be the first drug that can be used for abortion. Now, the advantages are tremendous. First of all, this is the first drug that would produce abortion without surgery. Secondly, there are countries which have very effectively used abortion as a means of population control. Countries of Eastern Europe, and some countries in the East, Japan being a good example. Most of these abortions are carried out surgically. Now if we have a drug that can safely produce abortion, then this again in the area of population control, it could be a great help. I recently heard that the big experiment in India in the field of contraception has run into several problems. One of them being that in the case of failed contraception there is no provision for permitting an abortion. Now, the Indian Parliament is, I believe, in the process of discussing such a law - an abortion reform law that would permit an abortion in case of failed contraception. Now here again, this means granting an abortion in a very large population in the country, and if this has to be done surgically, this would be a major disadvantage and a set back to any project like this.

ELIZABETH KEEBLE: Will it be manufactured commercially and internationally accepted?

PROFESSOR KARIM: Yes, this is going on. I have myself been going to different hospitals and universities all over the world talking about this at their invitation and there are at least half a dozen centres in Europe and the United States where this work is being repeated now, and the initial results are as encouraging as what we have found.

JOHN JONES:

Professor Sultan Karim, Head of the Department of Pharmacology and Therapeutics at Makerere University. He was talking to Elizabeth Keeble about his work on the labour inducing drug PROSTAGLANDIN F2 ALPHA.

And on that note it's goodbye for another week. We'll be back again next week of course at the usual time, so until then, from me, John Bankole Jones, it's goodbye for now.