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Worldwide Report

# EPIDEMIOLOGY

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WORLDWIDE REPORT  
EPIDEMIOLOGY

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ANGOLA

BRIEFS

SLEEPING SICKNESS REPORTED--At the time of its independence, Angola was one of the few countries in tropical Africa in which trypanosomiasis, the dreadful sleeping sickness caused by the tse-tse fly, had been eradicated. With the deactivation of the Portuguese health services and the lack of an adequate response, combined with the opening of the northern border with Zaire (a country struggling with the disease), the illness has again become established in Angola. As early as 1984, the authorities had called attention to the seriousness of the situation in the northern part of the country. Now, the disease has struck Bengo Province surrounding the Luanda region. According to the Angolan press, the provincial governors consider the situation of the agricultural workers who have been affected by this disease, which leaves them disabled and leads them to death, quite disturbing. Exacerbating this state of affairs is the fact that the workers are beset with enormous difficulties from the standpoint of lodging, food, and social and health facilities. Many observers think that the Cuban health personnel who are currently indoctrinating to some extent everywhere, have no experience with tropical medicine, a branch in which the Portuguese have attained a highly sophisticated specialization. [Text] [Lisbon AFRICA HOJE in Portuguese Feb 86 p 28] 2909

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BRAZIL

BRIEFS

YELLOW FEVER OUTBREAK--Health Minister Roberto Santos has confirmed the existence of three cases of yellow fever in Sao Paulo. Two people have died. [Excerpt] [Brasilia Radio Nacional da Amazonia Network in Portuguese 1000 GMT 26 Mar 86 PY] /9365

MALARIA OUTBREAK--According to the Health Ministry, a total of 11 cases of malaria have been detected in Foz do Iguazu, Parana State, after a period of 8 years with no cases. [Summary] [Rio de Janeiro O GLOBO in Portuguese 8 Mar 86 p 5 PY] /9365

REPORT ON AIDS--According to the latest reports issued by the Health Ministry, a total of 625 cases of AIDS have been detected in Brazil so far, of which 304 patients have already died. Of this total 74 percent has been detected in Sao Paulo State and 14 percent in Rio de Janeiro. [Summary] [Rio de Janeiro O GLOBO in Portuguese 5 Mar 86 p 5 PY] /9365

CSO: 5400/2047

CAMEROON

LEPROSY STATISTICS, INSTITUTIONAL ORGANIZATION LISTED

Yaounde CAMEROON TRIBUNE in French 29 Jan 86 p 5

[Article: "How Many Lepers Are There in Cameroon?"]

[Text] Leprosy is endemic worldwide. Its ravages are everywhere, without distinctions of race, sex, continent or climate.

The number of lepers in the world is not known with certainty. It is estimated that 15 million people are affected, with about 8 million in Asia, 5 million in Africa, 400,000 in South America and 50,000 in Europe. The numerous officially uncounted lepers (about 3 million) must be added to these figures.

It is estimated that the incidence of leprosy is on the order of about 1 percent of the population in Africa, but in some countries the proportion is well above that.

In 1975 there were 39,000 cases in Cameroon, in 1980, 27,000 and this year 23,000 were counted, of whom about half are under regular treatment.

About 1,000 new cases are reported every year. To combat leprosy the minister of public health has established a network which covers the whole country, with the considerable assistance of private institutions or groups.

The organization is as follows. The Directorate of Preventive Medicine and Public Hygiene coordinates the control efforts throughout the country through the Leprosy Bureau.

Although there has been a diminution in the number of cases, continuous efforts have to be made because results come only over a long period. In any event what is needed now is to see where things stand by making an accurate evaluation of the number of cases, for many cases may be going undetected and hence remain unknown. That is why a sampling investigation will be made this year by OCEAC [Organization for Coordination in Control of Endemic Diseases in Central Africa] and the minister of public health to establish the true dimensions of leprosy in Cameroon.

It will also be absolutely necessary to provide stricter control over people being treated for the disease so as to recognize any complications it may cause and to avoid the development of handicaps (paralysis, for example). Let's not forget that many of those who have been cured up to the present have been left with consequences of leprosy (amputation or paralysis) and that their social reintegration is still a serious problem.

CANADA

AIDS INTERNATIONAL SYMPOSIUM, LACK OF FUNDING DISCUSSED

Montreal International Symposium

Vancouver THE SUN in English 3 Mar 86 p A10

[Text]

MONTREAL (CP) — Some Third World governments are deliberately playing down the number of AIDS cases in their countries in order not to frighten away badly needed tourists, experts told a symposium on AIDS and the developing world.

And there is no way of knowing how widespread AIDS is in Africa despite assertions that much of the continent is riddled with the deadly disease, the symposium was told Saturday.

Dr. Wayne Greaves, chief of infectious diseases at Howard University in Washington, D.C., said Jamaica claims that it has not had a single case of acquired immune deficiency syndrome to date, whereas the country of Trinidad and Tobago claims it has had 16 cases.

But Greaves said he found 60 cases of AIDS in Trinidad when he was in that Caribbean country in December.

When he asked why the cases had not been reported, Greaves said he was told by officials, "Well, there's no rush."

"Certain countries are obviously not telling the world about their AIDS cases as they are afraid it will affect tourism," he said. "Can you believe that there have been no cases in Jamaica?"

Tourism to Haiti dropped dramatically after the Centres for Disease Control in Atlanta, Ga., in 1983 put Haitians — along with homosexuals, hemophiliacs and intravenous drug users — on a list of groups considered high-risks for getting AIDS.

AIDS is spread through contaminated blood or semen, and a mother can pass it on to a baby in the womb.

Greaves said one of the main reasons why there are enormous discrepancies in AIDS statistics in the Third World is that there is no world-wide standard for reporting confirmed cases.

As well, Third World countries are strapped for money to deal with other life-and-death health care issues and don't have the means to conduct studies to see how prevalent AIDS is in their countries, he said.

Similarly in Africa, there is no way of knowing if it's true that AIDS has reached epidemic proportions, said Dr. Pramod Shah, an infectious disease specialist at Montreal's Royal Victoria Hospital.

Canadian Funding Lack

Toronto THE TORONTO STAR in English 14 Mar 86 p F4

[Text]

EDMONTON (CP) — Important research into the deadly disease AIDS is not receiving the necessary funding in Canada, an Alberta health official says.

Dr. Cate Hankins, Calgary's deputy medical officer and a member of the National Advisory Com-

mittee on Acquired Immune Deficiency Syndrome, said Canada's research funding is a pittance compared with what the United States is spending.

"In Canada, we've allotted \$2 million to AIDS research," she told a packed forum at the Edmonton Convention Centre. "In the United States, the figure is \$180 million.

"There are some good research projects being proposed that aren't being funded . . . in this country," she said later in an interview.

Hankins said the two-year lag time in the spread of the disease to Canada "may be one of the things causing the delay in funding.

"It may also be . . . that there are so many excellent projects going on in the States that we just pick up on what they've learned."

But Hankins said this approach isn't good enough. She said it's important to have Canadian-based research because "our situation is different, our population is different."

She added it's also important that facilities for new anti-viral drugs and possible AIDS treatments be provided in Alberta.

Lack of proper funding means this can't be done now. Hankins said this could result in a drift of AIDS patients to Montreal, where treatment facilities exist, or to the U.S.

She also called for a change in Alberta health regulations to allow embalming of the corpses of AIDS victims and for open coffin funerals for victims of the disease.

/9274

CSO: 5420/62

CANADA

DECISION ON ASA LABEL, REYES SYNDROME REPORTING NOTED

Ottawa THE CITIZEN in English 12 Mar 86 p A6

[Text]

The government will force Canadian drug companies to put warning labels on all products containing the drug ASA if they haven't voluntarily done so by next September, Health Minister Jake Epp said Tuesday.

And Epp said he will ask his provincial counterparts to make it compulsory to report to health authorities cases of Reye's syndrome, the potentially fatal childhood disease which has been linked with use of ASA.

The labels will warn parents they should consult a doctor before giving children or teenagers with flu or chicken pox medicine containing acetylsalicylic acid but

the labels don't specifically mention Reye's syndrome.

About 30 per cent of Canadian drug companies have so far agreed to put warning labels on their ASA products but others are waiting for other labelling issues to be resolved before making the move, said Epp.

Last week, the United States government ordered drug companies to put warning labels on ASA products within 90 days with a specific reference to Reye's.

Reye's syndrome is a rare but serious illness with symptoms of extreme fatigue, excessive vomiting and aggression which sometimes develops in children and teenagers recovering from the flu or chicken pox.

/9274

CSO: 5420/62

CANADA

INFLUENZA INCIDENCE IN OTTAWA-CARLETON, GERALDTON NOTED

Ottawa-Carleton Cases

Ottawa THE CITIZEN in English 12 Mar 86 p B2

[Article by Jane Defalco]

[Text]

Ottawa-Carleton is still in the grips of an unusually high outbreak of influenza, health officials said Tuesday.

Health unit spokesman Rob Dolan said nine new cases have been reported in the past week, bringing the number of confirmed cases of influenza to 32 since January.

That's triple the number of cases reported in all of 1985.

While many common respiratory viruses result in flu-like symptoms, such as fever, an aching feeling and nausea, they are not true influenza viruses.

True influenza virus, either A or B, is a more severe form of the common flu.

The disease can erode mucus membranes in the nose and throat, clearing a path for bacterial infection.

In the elderly, newborn or those weakened by other illness, the bacterial infection may develop into pneumonia which could lead to death.

Dolan said six of the most recent cases have been found to be Influenza B, a more severe strain of the highly-contagious virus which causes coughing, high fever, congestion, aches and pains.

Dolan said the health unit is not overly concerned about the outbreak, but has continually stressed people use common sense and stay away from babies or the elderly if they have flu-like symptoms.

Geraldton Schools

Toronto THE TORONTO STAR in English 7 Mar 86 p A7

[Text]

GERALDTON (CP) — A Geraldton public elementary school has been closed because of a flu epidemic.

An unidentified virus kept 40 per cent of the students away from classes Wednesday.

"It's completely through the school," said principal Myra Letourneau after cancelling classes at the school in this town, 290 kilometres (180 miles) northeast of Thunder Bay. "Severe headaches, nausea, diarrhea . . . I hope this bug will go away by March 17 (when classes begin after the spring break)."

She said the number of children staying away from the 330-student school has been escalating all week — from 56 Monday to 126 Tuesday and 130 Wednesday.

There have also been less widespread outbreaks in two other schools in the area. About 20 per cent of the 215 students at a Roman Catholic school in Geraldton were away Wednesday, while 15 per cent of 265 students were absent from an elementary public school in Terrace Bay.

/9274

CSO: 5420/62

CHILE

BRIEFS

SIXTH CASE OF AIDS--According to physician Vicente Contreras, acting director of the Chilean University Hospital, the sixth case of AIDS in Chile has been confirmed in Santiago. [Summary] [Santiago EL MERCURIO in Spanish 1 Mar p C4 FY] /12913

CSO: 5400/2050

DENMARK

HEALTH AGENCY OFFICIAL WARNS AIDS MEASURES INADEQUATE

Urges Stronger Preventive Action

Copenhagen BERLINGSKE TIDENDE in Danish 19 Mar 86 p 1

[Article by George Hilton: "People Must Change Sexual Habits"; first paragraph is BERLINGSKE TIDENDE introduction]

[Text] People must change their sexual habits if preventive measures against AIDS are to be effective, in the opinion of Dr Michael von Magnus of the National Health Agency, who is now working on a massive information campaign. AIDS will cost society over 1 billion kroner by 1990.

Within a few years there will be so many new AIDS patients that treatment of the victims alone will cost the Danish society over 1 billion kroner.

That is shown by figures prepared by the National Health Agency. The Health Agency says that preventive efforts against AIDS are inadequate and that an effective prevention of the spread of the disease requires radical changes in the sexual habits of the entire population, not just people in high-risk groups.

Senior physician Michael von Magnus of the Health Agency said:

"If the trend continues as it has so far in this country, it will cost more than 1 billion kroner to treat the new patients who are diagnosed from now until 1990.

"The current efforts to prevent the spread of AIDS are inadequate. We have spent around 4.5 million kroner in all on this but an effective information campaign will cost several million and that is what we are working on now.

"Although we have not yet witnessed the spread of AIDS from the high-risk groups (primarily homosexuals and mainline drug addicts) to the general population, this will happen at some point.

"Therefore a major effort is needed to get high-risk groups, young people and the general population to change their sexual habits," said Dr von Magnus, who recently went on a ministerial AIDS study trip to the United States.

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In the United States a massive counseling campaign for "safe sex"--including the use of condoms and cutting down on the number of sexual partners--has cut the number of new AIDS victims in half.

In this country around 80 AIDS cases have been diagnosed so far and about half of the patients have died.

#### Blood Bank Stock Infected

Copenhagen BERLINGSKE TIDENDE in Danish 19 Mar 86 p 2

[Article by George Hilton: "Tests Reveal Four AIDS Donors"; first paragraph is BERLINGSKE TIDENDE introduction]

[Text] Since blood banks started testing donated blood for AIDS antibodies on 1 January, four donors with antibodies in their blood have been detected. In January this meant that 1 out of every 10,000 batches was infected.

Four blood donors with AIDS antibodies were detected in January and February as a result of the new nationwide blood tests for AIDS.

According to the report the nation's blood banks made to the National Health Agency three batches of blood containing AIDS antibodies, which can indicate that the donors and thus their blood harbor the infectious AIDS virus, were found among approximately 30,000 blood donations made in January.

#### Figure May Rise

Last month one batch of AIDS-infected blood was detected, but the statistics for February are not yet complete, so this figure could rise, the Health Agency told BERLINGSKE TIDENDE.

"The three batches that were found in January are well in line with our estimate that 1 out of 10,000 batches of blood is infected," said senior physician Michael von Magnus of the Health Agency. "At this time we cannot say to what extent the infected donors belong to the high-risk groups which have been asked via pamphlets and informational material not to donate blood."

The nationwide AIDS test of blood--the so-called AIDS screening test--has been performed in all Danish counties since the beginning of the year and was ordered in the fall by former Internal Affairs Minister Britta Schall Holberg (Liberal) after a lengthy skirmish with prominent AIDS researchers and the Health Agency. Experts felt that the roughly 20 million kroner required for screening should be spent to prevent the spread of AIDS.

At the same time the internal affairs minister also ordered that all blood products used for hemophiliacs, a quarter of whom are estimated to have received infected blood products over the years, be subjected to heating. The heat treatment ensures hemophiliacs against acquiring AIDS via blood transfusions, since it kills the AIDS virus if it is present.

However screening blood donations for AIDS does not give other patients 100 percent protection against being infected with AIDS. Theoretically AIDS-infected blood donations can slip through because the test only detects antibodies to the AIDS virus and it can take the body months to develop these antibodies.

Case, Cost Statistics Reported

Copenhagen BERLINGSKE TIDENDE in Danish 21 Mar 86 p 6

[Article by Hans Pilgaard: "Fight Against AIDS Will Cost 22 Million Kroner"]

[Text] At the end of 1985, 68 cases of AIDS had been diagnosed in Denmark--two-thirds of them in Copenhagen. It must be assumed that this trend will continue and that 70 new cases will be detected during 1986. Something must be done now and it will cost a lot of money.

The Municipal Council has proposed spending approximately 23 million kroner on treatment, study and prevention of the disease. There is broad political agreement on spending the money but little agreement on where it should come from. The deputy mayor in charge of hospitals, Jorgen Frederiksen, feels that the fight against AIDS should be a state task. "But this discussion must not prevent us from taking all the steps that are necessary," he said last night.

So far there is no solution to the financing problem, but a group of officials that was set up after a meeting attended by Copenhagen and Frederiksberg city officials, the County Council Association and officials from the Internal Affairs Ministry is completing a technical report that will then be evaluated politically.

Grethe Henius (Conservative) said it is important to discuss where the money should come from. "We support this proposal but we cannot keep this up. The money will not turn up like manna from heaven," she said and called Lars Hutter (Left-Socialist) a sissy when he mounted the speaker's platform for the third time to answer the question.

"It is important that a new hospital task not have an adverse effect on other patient obligations. That would be an extremely asocial principle," said Lars Hutter who stressed the importance of solidarity with the sick and the weak in our society.

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INDIA

BRIEFS

CHOLERA IN GUJERAT--Gandhinagar, March 7 (PTI): At least ten of the 173 affected persons have died of diarrhoea and vomiting in the cholera struck Tundav village in Savli taluka of Baroda district since January last, the health minister, Mr Vallabhai Patel, informed the state Assembly today. He said immediate steps were being taken to provide cholera vaccine and other treatment to the affected people. [Text] [Calcutta THE TELEGRAPH in English 8 Mar 86 p 7] /9274

CSO: 5450/0123

KENYA

#### DIARRHEAL DISEASES REMAIN MAJOR HEALTH THREAT

Nairobi DAILY NATION in English 4 Mar 86 p 3

[Text] Diarrhoeal diseases are among the top five major causes of illness in Kenya, the director of communicable diseases, Dr T.K. arap Siongok, told a five-day health seminar at Silver Springs Hotel in Nairobi yesterday.

"Twelve percent of all hospital admissions and nine percent of all reported deaths, malnutrition and growth retardation are all linked to diarrhoeal diseases," Dr Siongok, who is also senior deputy director of medical services, said.

Control and prevention of diarrhoeal diseases, especially for children under five years, remains a major priority in the Ministry of Health, he said. Sixty to 70 percent of diarrhoeal diseases end in death because of dehydration but there is no excuse for this because oral rehydration therapy (ORT) can be used to prevent it, he added.

Dr Siongok, who was addressing 40 health workers from eight districts in the country said 4 to 5 million children under the age of five died annually in Asia (excluding China), Africa and Latin America.

However, Dr Siongok said that adequate and clean water, proper nutrition, plus better hygiene were still needed to combat diarrhoeal diseases.

Dr Anders Blaxhult from the World Health Organisation (WHO), who is involved in the training of the health workers on control of diarrhoeal diseases, said that ORT treatment was included in the essential drugs list. He expressed the hope that shopkeepers would soon be allowed to sell the ORT drugs just as they sell malarial drugs.

He said some diarrheal diseases such as those with bloody discharges like in amoebic dysentery must be given further medical treatment and not just the ORT.

"It may take five of these training seminars for some health workers to get new skills in control and management of diarrhoeal diseases," he said.

The health workers being trained in control of diarrhoea are from South Nyanza, Murang'a, Nakuru, Kakamega, Baringo, Siaya, Kitui and Embu.

NIGERIA

CEREBRO-SPINAL MENINGITIS DEATHS IN BAUCHI

Lagos DAILY TIMES in English 27 Feb 86 p 2

[Text]

**A**BOUT 40 persons have been reported dead following an outbreak of cerebro-spinal meningitis (CSM) in parts of Gombe and Dukku Local Government areas of Bauchi State, according to the sole administrators of the affected areas.

A correspondent of the News Agency of Nigeria (NAN) reports that the affected villages are: Dambat-Fulani and Malam-Sidi in Gombe Local Government and Matada, Bajoga, Tongo, Lalari and Dakkatari in the Dukku Local Government.

The sole administrator of Gombe, Alhaji Baba Abubakar, told NAN on Tuesday that 20 persons had died since the outbreak of the deadly disease in the affected villages about a month ago.

He said that the case had since been reported to the state Ministry of Health and that the situation was now under control.

Meanwhile, the sole administrator of Dukku Local Government, Alhaji Majinyawa Ibrahim, said that more than 20 persons had died following the outbreak of the disease in the area last month.

He said that more than 100 patients were treated and discharged at Bajoga General Hospital in the past two months, adding that a team of medical officials from the local government and the state Ministry of Health had been drafted to the affected areas to embark on intensive vaccination to check the spread of the disease.

/12851  
CSO: 5400/97

BRIEFS

MENINGITIS EPIDEMIC SPREADS--Lagos, 21 Mar (AFP)--At least 84 people have died of cerebrospinal meningitis in northern Nigeria, it was learned in Lagos on Friday. At least 70 people died of the disease in hospitals in Bauchi State, while a dozen died in Kano State along the border with Niger, according to the Nigerian press. The government has dispatched three million vaccines to Kano State alone where the epidemic is said to be more severe this time than before. Meningitis which is a deadly disease in 20 to 30 percent of cases, is rampant every year during the dry season in the Sahel, from Senegal to Ethiopia but in some years, the epidemic has increased. [Text] [Paris AFP in French 1416 GMT 21 Mar 86 AB] /12858

CSO: 5400/99

ST LUCIA

OUTLINES OF ROTARY-ASSISTED IMMUNIZATION PROGRAM REPORTED

Castries THE WEEKEND VOICE (7th INDEPENDENCE ANNIVERSARY supplement) in  
English 22 Feb 86 p 4, 21

[Text]

ROTARY International is assisting St. Lucia with a massive immunisation programme which is expected to involve thousands of St. Lucian children over the next five years.

Under the Expanded Programme of Immunization, the Ministry of Health says it has immunized 81% of all children under one year of age against polio, whooping cough, diphtheria and tetanus, 75% against tuberculosis and 80% against measles. Rubella immunisation has also been introduced in Saint Lucia during the past year.

Now, with the assistance of Rotary International, it is expected that during the next five years, 62,000 of St. Lucia's children will receive protection from polio, measles, rubella and mumps through a U.S.\$68,000 Rotary Foundation's Health, Hunger and Humanity (3-H) Programme grant to the Rotary Clubs of Saint Lucia.

The combined measles, mumps and Rubella vaccine will be introduced for the first time in Saint Lucia for immunisation of 1-2 year old children. The vaccine is expected to provide these children life long immunity against these diseases and over 15,000 children will be given this vaccine during the next five years.

In the same period, the grant will also provide Rubella vaccine for 30,000 boys and girls in the age group 5-18 years. The grant will also supply enough vaccine to protect 20,000 children under one year of age against Polio for the next five years.

According to Health officials here, Saint Lucia is in the forefront of Caribbean countries providing such comprehensive immunisation services.

"Indeed not many developed countries can boast of such an extensive coverage against the major infectious diseases of childhood," a Ministry of Health spokesman said.

/9317  
CSO: 5440/063

TANZANIA

BRIEFS

CHOLERA OUTBREAK OVER--Shinyanga--The cholera outbreak which affected Shinyanga region [80 miles south of Lake Victoria in N. Tanzania] for more than 6 months has now been eradicated. A statement issued by the Office of the Regional Medical Officer, Shinyanga, Ndugu John Kweba, said that there are no cholera patients in the region now. The statement said [name indistinct] and Ndala areas near Shinyanga town where the virus of the disease [sentence as heard]. It said that cholera had been eradicated thanks to the efforts of doctors in the region, who were helped by party leaders and government officials. However, the statement called on inhabitants of the region not to ignore anti-cholera measures. Cholera has claimed more than 20 lives in Shinyanga region since it broke out there last October. [Text] [Dar es Salaam Domestic Service in Swahili 1700 GMT 21 Mar 86 EA] /9274

CSO: 5400/100

TRINIDAD AND TOBAGO

MINISTRY URGES DOCTORS TO REPORT ALL COMMUNICABLE DISEASES

Port-of-Spain EXPRESS in English 19 Mar 86 p 3

[Text]

**PRIVATE** practitioners were last week warned of the necessity for reporting the incidence of communicable diseases.

The meeting was organised by the Ministry of Health and Environment to impress upon doctors the need to report these diseases. Speaking to the doctors were Drs Glenda Maynard and Roderick Dougdeen, both of the Ministry of Health.

Dengue fever, measles, gastroenteritis and food poisoning are among the least reported of these diseases. So much so that measles is on the rise in this country.

The sentinals' (private practitioners) reluctance to make reports baffles the Ministry. According to one source the Ministry has gone so far as to design the forms, distribute them and make arrangements to collect them but doctors' reluctance for what ever reasons, are firmly entrenched.

At the meeting one doctor told of having found a case of dengue haemorrhagic fever in their area. This is more serious than type one dengue fever but less common in occurrence.

Using this case to illustrate the need for the reporting of diseases a doctor said for instance if such a disease was reported to the Ministry the following would normally obtain. The public health team would be notified and would spray the location where the case was identified and would return on successive occasions.

This would be necessary because dengue haemorrhagic fever though it can be spread from person to person is also spread by the mosquito, aedes aegypti.

/9317  
CSO: 5440/064

TRINIDAD AND TOBAGO

BRIEFS

GASTROENTERITIS CONTROL--St John's March 17, Cana--Health Officials in Antigua say they have been able to control a gastro-enteritis epidemic among all age groups. Chief Medical Officer, Dr Thomas Jones, said a little less than 500 reported cases of the disease had been handled since the outbreak, which reached a peak in late February and early March. Of this total, 40 cases were hospitalised for special treatment, but no deaths have been associated with the outbreak. However, although the reported cases are on the decline, the Ministry of Health has not been able to isolate the true cause of the outbreak. However, although the reported cases are on the decline, the Ministry of Health has not been able to isolate the true cause of the outbreak. The Chief Medical Officer said the fact that no deaths had been associated with the outbreak was quite outstanding, and this was primarily because persons affected sought early medical attention. [Text]  
[Port-of-Spain TRINIDAD GUARDIAN in English 18 Mar 86 p 5] /9317

CSO: 5440/064

JPRS-TEP-86-009  
21 April 1986

URUGUAY

BRIEFS

FOUR FATAL AIDS CASES--Montevideo, 27 Feb (AFP)--Health officials today reported that four individuals have died from AIDS since the illness appeared in this country in 1983. According to officials, there are 55 patients infected by the HTVL VIII virus, an AIDS carrier, but they are only affected in a benign manner. The sources reported that the illness is under control and that there is no danger of it spreading. [Text] [Paris AFP in Spanish 1402 GMT 27 Feb 86 PY] /12913

CSO: 5400/2049

BOLIVIA

BRIEFS

FOOT-AND-MOUTH DISEASE OUTBREAK--According to a preliminary report issued by the Peasant Affairs Ministry, a total of 8,000 head of cattle have caught foot-and-mouth disease in the flooded areas of La Paz Department. [Summary] [La Paz PRESENCIA in Spanish 14 Mar 86 p 9 PY] /9738

CSO: 5400/2048

GERMAN DEMOCRATIC REPUBLIC

PREVENTATIVE VETERINARY MEASURES ADOPTED TO COMBAT EPIDEMICS

Jena MONATSHEFTE FUER VETERINAERMEDIZIN in German Vol 41 No 1, Jan 86 pp 1-5

[Edited report by Prof Dr H. Schwedler, director of department for veterinary services, GDR Ministry for Agriculture, Forestry and Foodstuffs, at the joint conference of the GDR Scientific Society for Veterinary Medicine and the section livestock production and veterinary medicine at Humboldt University, Berlin, on the occasion of the 175th anniversary of the Humboldt University on 10 and 11 April 1985 in Berlin: "On the Strategy and Tactics for Combating Livestock Epidemics in the GDR"]

[Text] Summary: Strategy and Tactics of Anti-Epidemic Veterinary Control in the GDR

The effective protection of livestock from epidemic parasitoses and other extraordinary hazards is the political and economic criterion by which to measure the efficiency and striking power of veterinary services. High yield livestock production which can make a positive contribution to the steady improvement of food production is the strategic purpose of anti-epidemic veterinary activities in the GDR. Reference is made in some detail to the following four major tactical steps taken to ensure the strategic goal of absence of epidemic diseases: Prevention of the import of epidemic diseases into the GDR; techno-scientific, physical, administrative and organizational measures to isolate and eradicate imported epidemic diseases; the planned reduction and elimination of epidemic livestock diseases at regional level; the systematic and comprehensive application of vaccines to certain epidemic diseases with a view to limiting or even eliminating economic consequences.

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Stable and high-quality food supplies for the general public are an indivisible and indispensable element in the policy of the main task in its unity of economic and social policy, the continued pursuit of which was decided by the Tenth SED Congress. We are constantly reminded that food supplies for the general public represent a supreme political task and are the

specific political responsibility of cooperative farmers and workers in agriculture and the food industry and, consequently, the personnel of the veterinary services. After all, more than two thirds of the food consumed is generated by livestock production.

In view of the increasing importance of food in the international class conflict between socialism and capitalism and from the aspect of the political stability and the developed socialist society in the GDR, we need to particularly appreciate the fact that we have succeeded on the basis of the SED resolutions to guarantee the satisfaction from domestic production of the rising public demand for food and, to a large extent, industry's needs for agricultural raw materials. The implementation of the SED's strategy for the 1980's has significantly advanced the efficiency of food production.

The stability, continuity and improved performance of livestock production and, therefore, the planned daily supply of food of animal origin crucially depend on the health of the livestock. Livestock epidemics, in particular, substantially upset the health of livestock holdings and often irretrievably impair their function to produce essential foods. By their quick spreading to livestock holdings in regions and districts, livestock epidemics tend at regional or national level to generate disruptions of food supplies of animal origin and, in the case of zoonoses, to directly threaten the health and even the life of sections of the general public. Consequently, it is imperative for political and economic considerations to protect livestock production from diseases, parasitoses and other extraordinary hazards, and such protection must be the prime criterion of the efficacy and efficiency of the veterinary services, the scientific-technical standard of its measures as well as sense of responsibility and the abilities of its personnel.

The national economy's protection from livestock diseases, parasitoses and other extraordinary hazards is the responsibility of the veterinary services and represents the supreme task of the uniformly directed state veterinary system in all its subdivisions and services. This calls for tight state management, a high standard of organization and the greatest possible discipline and readiness to serve of all veterinarians and staffs of the veterinary services.

In this respect, too, the veterinary system is an integral part of socialist agriculture. However, the prevention and combating of livestock epidemics or any other kind of veterinary work is not an end in itself. That is why the accomplishment of tasks in livestock production represents a decisive criterion for the success of the work of veterinarians and the staffs of the veterinary services. In this year prior to the Eleventh SED Congress, all those who are in some way responsible for livestock production must help make available 2,540,000 tons slaughter cattle, 7,050,000 tons milk and 4,800 million eggs. The strategy and tactics of combating livestock epidemics are also oriented to the need for the accomplishment of these tasks within the framework of agropolitical targets.

The fight against livestock diseases in the GDR has the strategic objective of a livestock production that steadily raises its contribution to food production, without interruptions, losses or other hazards of production.

As regards livestock epidemics that are also zoonoses, the protection of the public at large is definitely the first consideration.

The absence of livestock diseases or the removal of its effects are fundamental requirements

-- For the comprehensive intensification of livestock production,

-- For the utilization of the entire potential of scientific-technical advances in livestock production,

-- For the full impact of efficient structures of livestock production by specialization and cooperation.

At the same time, the certain prevention of livestock diseases or their removal as a production hazard involve significant social and sociopolitical targets. Livestock holdings are an important element of the national wealth and the basis of production by the class of cooperative farmers, the chief ally of the leading working class. The stable economic development of agricultural producer cooperatives and the organization of the working and living conditions of cooperative farmers depend on the health and performance of the livestock. The same applies to individual livestock production.

We all know that Lenin characterized livestock diseases as political, economic and social enemies of society, which need to be combatted by all the resources of the government and society. This dictum applies more than ever in our time. Consequently, the prevention and combatting of livestock diseases represent tasks of national importance and have to be directed and decided from a total societal standpoint. Their implementation must rely on the conscious cooperation of broad sections of the public as well as on that of the people working in socialist agriculture.

The following are the four principal tactical measures to ensure the strategic objective of eliminating livestock diseases from our country:

-- The importation of or invasion by livestock epidemics in the sovereign territory of the GDR must be prevented by the use of all scientific methods coupled with all necessary administrative and organizational measures. These measures must be centrally directed and carried out independent of the various economic and social sectors.

-- In the case of the importation of or invasion by a dangerous livestock diseases, state organs, enterprises and cooperatives must have available the scientific, material-technical, administrative and organizational resources for isolating and liquidating the disease in the affected region.

-- Livestock diseases endemic in a region must be contained and finally eliminated altogether--systematically, as planned and directed by the government. Priorities need to be established as per economic considerations.

-- With regard to some livestock diseases, it is feasible from the economic standpoint and also reasonable to limit or eliminate their economic effects by the planned and comprehensive use of vaccines, in other words by immunobiological methods, although the epizootic process is not interrupted thereby. This practice is common especially in combatting viral diseases in industrialized poultry production (Marek disease, Gumborro disease, avian encephalomyelitis, and so on).

The livestock epidemic situation and the epizootic process are also affected by several external and internal factors which will have to be considered in greater detail.

The geographical situation of our republic in the center of Europe, the expansion of connections and international trade, our special role as a transit country all spell out increasing dangers. In 1984, for example, more than 400,000 livestock and commodity shipment subject to veterinary controls passed our frontiers, involving almost 2 million farm animals and some 1.5 million tons animal products and raw materials, and so did more than 250,000 small animals and pets. Travel and tourism, bird migration, the spread of winged and other ectoparasites as well as windborne pathogenous organisms are also factors affecting the extraregional spread of epidemics. As the result of interference caused by genetic technology in the properties of viruses and bacteria, science also offers possibilities for abuse by imperialism in the guise of biological warfare.

The 1984 situation in Europe with regard to livestock epidemics was quite complex:

-- About 250 MKS outbreaks (FRG, Turkey, Greece, Netherlands, Italy--types A5, O1, A22, Asia 1).

-- Some 1,500 outbreaks of swinepest (1,004 in the FRG, others in the Netherlands, Greece, Italy, Belgium, France, Yugoslavia, Austria).

-- More than 700 epidemic cases of African hog cholera in Portugal, Spain and Italy.

-- More than 400 outbreaks of Newcastle disease.

-- More than 680 outbreaks of pulmonary epidemic.

In the first quarter 1985, too, Europe recorded epidemics: 9 cases of African hog cholera in Belgium, around 190 cases of hog cholera and 500 of Ayjezky's disease in the FRG as well as more than 100 cases of foot and mouth disease in Italy.

In view of our republic's geographical location, this evident trend to further cosmopolitization of hazardous livestock epidemics and the permanent nature of this threat, the current measures of livestock epidemic prevention must be implemented even more comprehensively and energetically. In accordance with managerial responsibilities, we have found it useful to establish and extend the following part systems of livestock epidemic prevention:

-- The early warning system and the scientific preparation for the prevention and combatting of foreign livestock epidemics as well as the early initiation of national protective measures in the sphere of responsibility of the central veterinary organs.

-- The prevention of any importation of livestock diseases at the national borders in the sphere of responsibility of the central veterinary organs.

-- The prevention of the spread of livestock epidemics in the sphere of responsibility of the veterinary organs in districts and subdistricts.

-- The local protection of livestock production in the sphere of responsibility of the veterinary organs of Kreises and state veterinary centers.

In the case of the early warning system, we need conclusions drawn from the systematic and comprehensive collection of data and the observations regarding the international livestock epidemic situation. This must be coupled with thorough epizootiological studies of foreign livestock epidemics, investigations of the regularity and tendencies of international outbreaks and spreading, the biological properties of the pathogenous organisms in their interaction with the livestock affected, the strength of resistance of the pathogenous organisms, the appropriate diagnostic and immunoprophylactic methods in their international development. At the same time we must carry on our own experimental work.

This includes the expansion of diagnostic methods for the rapid recognition and differentiation of the foreign pathogenous organisms causing livestock diseases. We are therefore concerned both with the application of internationally known and traditional methods for proving the presence of pathogenous organisms and the development of highly accurate methods for the ascertainment of the tiniest quantities of viruses with the aid of ELISA and RIA equipment as well as the work with monoclonal antibodies. Of the greatest importance are such elegant diagnostic methods as peptide mapping or the so-called fingerprint method for elucidating the peptide configuration of viruses. The latter allows even more differences to be made visible for one and the same type or subtype of virus.

Rapid diagnoses are decisive for the isolation and eradication of an invasive livestock disease. Among the scientific preparations for coping with foreign livestock epidemics is the establishment of comprehensive factor research on pathogenous organisms causing diseases. We must therefore prepare data on active or passive behavior, the rate of survival depending on surroundings, and so on, of carrier organisms or carrier substances. Surveillance screening should be considered and tested with regard to some factors, livestock products, wild animal population and migratory birds, ectoparasites, and so on. Other scientific preparatory work consists in the further development of disinfectants and disinfecting equipment. All this work has been initiated. We are most concerned with the development of disinfectants having a broad range of effects and fully effective even at low temperatures.

The work done on the development of antiviral substances must also forge ahead, in conjunction with the Academy of Sciences. When combating livestock epidemics for which we have vaccines, it would be possible thereby to bridge the delay between the recognition of an epidemic and protective vaccination on the one hand and the taking effect of the vaccine in large herds or specific regions on the other. This would help the fight against epidemics.

In addition to these research tasks, other management tasks must also be accomplished, such as

-- International agreements on reserves of vaccines against specific exotic livestock diseases to be concluded with countries where such diseases are endemic;

-- The training of special veterinarians for preventing and combating exotic livestock diseases;

-- Periodic exercises at the national level with respect to measures for the isolation and eradication of invasive livestock diseases,, including cooperation with the CEMA countries.

Protection against the importation of livestock epidemics at the national borders presumes comprehensive knowledge of the international development of livestock epidemics. Of great help here is our close cooperation with the International Agency for Livestock Diseases and the GDR's membership of this international organization, established in 1924. The government agreements concluded with most European countries on cooperation in the field of veterinary services also serve this objective.

Whenever the situation with regard to livestock diseases has been uncertain or seemed to require it, we have found it useful to have specialists of our republic's veterinary services investigate conditions in the country of origin before issuing decisions on the importation or transit of animals, animal products and raw materials as well as objects that might be carriers of infectious substances.

The 1984 border surveillance decree and the conversion of the veterinary hygienic traffic surveillance service to the GDR border veterinary service served to further develop the tasks and responsibilities of this veterinary unit and conclude the reorganization of this sphere. The responsibilities and powers of the personnel of the border veterinary service were significantly expanded.

The prevention of the spreading of livestock diseases and the immediate prophylactic safeguarding of livestock production and processing plants for animal products proceeded in accordance with well tried methods of animal health supervision by means of diagnostic programs in accordance with veterinary police measures, with the principles of structural/functional prevention of livestock diseases in barns and livestock production plants as well as organizational rules dealing with the prevention of livestock diseases

(among others). The requirements of disease prevention in livestock and animal trade in general have been revised in the 1984 fourth implementing regulation to the livestock epidemic decree.

These duties represent the general tasks of district epizootiologists, kreis veterinarians and veterinarians in state veterinary centers. In 1985 we remembered the 30th anniversary of the latter's establishment. Also involved in these tasks are the veterinarians in the veterinary hygiene inspectorates and veterinary hygiene services as well as in all other sectors.

The veterinarian is the specialist in our society and, on the basis of his scientific knowledge and practical experience, bound to clearly determine the requirements of the prevention of livestock epidemics and propose measures for combating such epidemics at the national level. He holds the necessary powers and status. That is the special responsibility carried by this profession as a social command. We must all clearly understand this. Such a responsibility cannot tolerate routine approaches. In addition to advanced scientific knowledge and thinking in economic terms, it requires above all the ability to conduct effective informational and persuasive work in order to conquer human ignorance and thoughtlessness--the main enemies of disease prevention. Compromises in regard to the prevention and combating of livestock epidemics sooner or later always have costly consequences. It is imperative resolutely to safeguard our larger and concentrated livestock holdings by preventative measures and to manage livestock as a hygienic unit. Animals leaving such establishments and stocks will not be returned to them. Transfers of animals must definitely be restricted. Additions to livestock must be preceded by a secure quarantine. Outside barns, away from such larger and concentrated livestock holdings, must be managed quite separately. This presumes a very definite alertness to the fact that any genuine intensification of production must always be accompanied by greater production safety.

The vehicles used by abattoirs for carrying slaughter cattle and by animal body processing enterprises for carrying cadavers represent connections between livestock production enterprises, livestock production plants and barns. We need to pay greater attention to these connections. It is imperative to concentrate disease prevention to the following two principal measures:

-- Checks must be generally reinforced with regard to the thorough cleansing and disinfection of the above mentioned vehicles before they are released for leaving the enterprise. In specially hazardous situation (threat of epidemics), these checks must be organized in a seamless manner.

-- The vehicles mentioned above may not enter the livestock production areas when collecting slaughter cattle or cadavers. The handing over must proceed at places secured from the aspect of hygiene.

Liquid manure is demonstrably a significant factor in the spread of epidemics, though hazards vary in dependence on the respective pathogenous organism. For the purpose of livestock disease prevention, it is imperative for

-- Liquid manure distribution plans to be at all times coordinated with the competent veterinarian;

-- Liquid manure never to be applied in the immediate vicinity of outside livestock production plants or barns;

-- Liquid manure never to be applied to green fodder fields (or in their immediate vicinity), which are earmarked for the fodder supply of outside or other livestock holdings. Aerosols are generated when liquid manure is applied by irrigation, and--in the case of contaminated liquid manure--such aerosols may allow pathogenous organisms to drift.

The promotion and expansion of personal livestock holdings in recent years have yielded results and supply performances which we cannot even think of losing now. More than 10 percent of slaughter cattle yields, more than 20 percent of slaughter poultry yields, almost all slaughter rabbits and 30 percent of hen's eggs are generated by this sector. Three aspects are decisive with regard to disease prevention:

-- Individual livestock producers must be supplied with calves, weaner piglets and young sows on the regional principle. Purchases from other LPG's and other subdistricts should be avoided in cooperation with LPG executive boards and cooperation councils.

-- As provided by legal regulations, care must be taken to ensure that livestock keepers may individually look after livestock not cared for by them in concentrated livestock holdings and plants.

-- Personal livestock keeping must be more extensively than hitherto included in preventive livestock health supervision.

We must not ever underestimate the role of rodents as carriers of several viral diseases. We must definitely generalize the positive experiences gained by constant antirodent measures in livestock production in accordance with the methods and principles fixed as per the standards in effect in the respective sector and applied by trained specialists in the livestock production enterprises under the direction and supervision of the competent veterinarians. These must be a solid element of livestock disease prevention in every village.

Livestock production in areas along the national borders is particularly threatened by epidemics in neighboring countries. With the exception of livestock destined for slaughter, animal transfers and cooperation relations in livestock production should occur only within fixed border areas and not proceed to the interior of the country.

More precautions need to be taken also with regard to airborne virus transfers. We know from international research publications and data on the spread of epidemics that a pig taken ill with MKS, for example, secretes large quantities of viruses by way of its lungs and breathing, while beef cattle need only to inhale small quantities of viruses for contracting an infection. In view of our concentrated livestock holdings and the forced air ventilation

typical for their barns and plants, airborne transmission is a real hazard in certain humid and windy conditions. MKS virus transmissions at distances in excess of 100 km have been demonstrated in Britain in such conditions.

The standard of the development of productive forces in our LPG's and VEG's [state farms] and the concentration and specialization achieved in livestock production logically resulted in cooperation. Cooperation relations are specially emphasized in livestock production, in the form of deliveries of breeding animals, young livestock for rearing and cattle for feeding. These relations extend well beyond the immediately locality to other areas of the kreis, other kreises and districts.

At the present time we are collecting more experiences regarding the collaboration of veterinarians in the cooperation councils of LPG's for crop and livestock production. It is already evident that one of the outstanding tasks is that of enforcing livestock disease prevention comprehensively and consistently in the cooperation of not only the LPG's for livestock production but just as much in the work of crop production, agrochemical centers, the mixed fodder industry, and so on, all of which may directly or indirectly infiltrate pathogenous organisms in livestock production.

We must reinforce in these sectors the planning of the prerequisites for effective livestock disease prevention, the work with the livestock epidemic alarm plan and the livestock hygiene order, consistent informational work and further training and supervision.

As regards combating livestock epidemics, this requires:

-- The veterinary organs to be familiar with the network of cooperative livestock deliveries'

-- In the case of disease in a supplier enterprise, the measures for combating epidemics must at once take effect at all partners supplied, depending on delivery dates and the longest possible incubation period;

-- For these reasons and with regard to other economic interrelations between enterprises and regions, the combat against epidemics must always be based broadly enough not to fall behind the spread of the epidemic. As a rule this requires the management and coordination of combatting epidemics to be at once concentrated in the district organs rather than Kreis organs, though the responsibilities and duties of the kreis livestock disease commission and the Kreis veterinarian are by no means diminished. The supraregional deployment of experienced veterinary specialists in the area affected by the epidemic has fared very well in support of the local veterinary services.

The protection of livestock holdings requires every veterinarian at all times to responsibly assess from the political and economic standpoint the threat of livestock diseases and their effect and, based on up-to-date technical knowledge, initiate and propose the necessary preventive and combatting measures.

Our universities and the GDR Scientific Society for Veterinary Medicine as well as the state managers are responsible for thoroughly deepening the knowledge of the epizootiological connections and their economic effects in the training and further education of veterinarians and other veterinary specialists. That is a sound basis for passing on the requirements of livestock disease prevention to the managers and workers in crop and livestock production as well as in the enterprises for processing animal products. The worker or member of the general public is certainly not aware of everything that appears a matter of course to the veterinarian as a specialist, nor do such requirements appear logical or provide motivation for their actions. Success in livestock disease prevention will largely depend on the success achieved by the veterinary services in increasing knowledge of livestock epidemics among these people and relating as a political concern the requirements of livestock disease prevention to the struggle for the protection of the people's property and cooperative property, for order and safety.

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CSO: 5400/3012

INTER-AFRICAN AFFAIRS

SPRAYING CAMPAIGN AGAINST RIVER BLINDNESS ENTERS NEW PHASE

Nairobi THE KENYA TIMES in English 19 Feb 86 p 2

[Text] The campaign to eliminate onchocerciasis, or river blindness in West Africa--the largest and most successful health programme in Sub-Saharan Africa--entered a new phase this month.

In a signing ceremony in Washington hosted by World Bank President A.W. Clausen and attended by representatives of some 30 nations and the international organisations, the third phase of the Onchocerciasis Control Programme (OCP) was launched officially. It will last from 1986 to 1991 and will cost an estimated \$133 million.

The programme was started in 1974 and aimed at controlling onchocerciasis in seven countries in the Volta River basin of West Africa. The disease, caused by a parasitic worm transmitted by bites of blackflies, was endemic in these areas with frequently over 60 percent of the people infected. It produced a variety of debilitating symptoms including blindness. The malady was also an impediment to economic development since the blackfly breeds in rivers near potentially productive land.

Today, as a result of the campaign, the original control zone is virtually free of the disease. Transmission has been completely halted in 90 percent of the area and no new cases of the disease have been reported in recent years. Some 3.5 million children born since OCP started are no longer at risk. People are beginning to migrate into the fertile valleys they once avoided or abandoned. In Burkina Faso alone, it is estimated that more than 15 percent of once uninhabited land has been resettled and cultivated as a direct result of disease control.

The first two phases of the campaign have cost about \$162 million or less than \$1 per protected person per year. Nineteen donor countries and organisations are contributing to the third phase. The World Health Organisation (WHO) implements the programme and the World Bank is responsible for raising and managing the funds.

The latest phase of the programme will extend coverage from the original seven countries (Benin, Burkina Faso, Ghana, Ivory Coast, Mali, Niger and Togo) westward to Guinea, Guinea-Bissau, Senegal and Sierra Leone. Phase Three will also expand control into western Mali and to the southern portions of Ghana, Benin and Togo. Extension of the programme will have two major

benefits. It will halt reintroduction of the diseases from the west and south by migratory blackflies, enabling the campaign to be concluded by 1997. And it will provide protection from disease to an additional 8 million people in the new areas.

Onchocerciasis is being controlled by destroying the blackfly larvae with aerial spraying of insecticides in their breeding places in rivers and streams. Under Phase Three this spraying will continue while the search goes on for an effective drug to prevent or treat the disease.

During this latter phase the African countries covered by the programme will begin to take over the monitoring of the disease. The Onchocerciasis Control Programme and WHO will help with maintenance activities. WHO will also continue in an advisory capacity after OCP ends.

The Onchocerciasis Control Programme is a showcase of international co-operation. For 12 years the same community of donors has maintained support and some donors have pledged larger commitments for the new phase. The support and direct involvement of the African beneficiary governments in OCP operations have been particularly important.

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CSO: 5400/79

NIGERIA

NEW CHEMICAL FOR TSE-TSE FLY CONTROL DISCOVERED

Kaduna SUNDAY NEW NIGERIAN in English 2 Mar 86 p 16

[Article by Ike C. Unegbu]

[Text]

THE Nigerian Institute for Trypanosomiasis Research (NITR), Kaduna has discovered a chemical substance in tse-tse flies capable of controlling the spread of the insect which bears a deadly disease known as sleeping sickness.

The Director of Agricultural Sciences at the Federal Ministry of Science and Technology, Dr. S.A. Adetunji who made the disclosure in Lagos said that research at the institute showed that when mixed with insecticides, the newly discovered substance was capable of enhancing the control of tse-tse flies.

Trypanosomiasis or sleeping sickness usually borne by tse-tse flies causes weakness, sterility, impotence or abortion in cattle, sheep and goats while in humans it causes sleeping sickness and death, Dr. Adetunji further revealed.

According to the director, researches conducted at the institute had led to the identification of 11 species of tse-tse-borne diseases that are capable of transmitting trypanosomiasis from one animal to the other.

Another achievement recorded by NITR which was established in 1947 to carry out researches into and provide advisory services on all aspects of tse-tse-borne diseases in man or animal for West African Commonwealth countries is the identification of the causes of river blindness known in the medical world as onchocerciasis.

He said that the data collected on the disease by the institute was being used in the national onchocerciasis control programme in Nigeria today, adding that the institute had also conducted surveys on trypanosomiasis or onchocerciasis for various state governments including Kaduna, Plateau, Benue and Kwara.

Furthermore, the institute treats cases of trypanosomiasis and onchocerciasis, he said.

Commenting on rumours that NITR was about to be merged with the National Veterinary Research Institute, Vom near Jos, Plateau State, Dr. Adetunji said that he was not aware of any such plans, adding that there was no way such merger could be carried out without the approval of the government.

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CSO: 5400/97

NIGERIA

APHIDS KILLER DISEASE INFESTS LEAVES IN KATSINA

Kaduna NEW NIGERIAN in English 27 Feb 86 p 2

[Article by Shitu Saude]

[Text]

AN outbreak of aphids killer disease that infest leaves of any crop has been reported in Katsina.

The Emir of Katsina, Alhaji Mohammad Kabir Usman told *New Nigerian* in his palace that the disease has severely affected trees in Magajin Gari, Mallamawa and Kaura districts.

The Emir, therefore, urgently called on the government for aid to control the killer disease through the help of crop protectionists in the state.

He said the disease could spread to the whole emirate without being noticed by the public which may probably affect food production in the area during the coming rainy season.

An agricultural assistant superintendent with the Kaduna Agricultural Development Project, Malam Yakubu Barda'u, confirmed to the *Window on the Countryside* the outbreak of the disease and said experiments were being carried out at Ajiwa to identify the type of insecticide that could be used to control the disease before things get out of hand.

Meanwhile the role of plant protection in crop storage has become a major concern for plant protectionists in the country. To this effect, a seminar has been fixed for March 16-20 in Zaria for highlights.

Plant protection scholars from various parts of the country were expected to take part in the seminar scheduled to be held at the Institute of Agricultural Research, Ahmadu Bello University (ABU) Zaria.

/12851

CSO: 5400/97

SOUTH AFRICA

LOCUST PLAGUE SPREADS TO MORE DISTRICTS

Locust Control Costing Millions

Port Elizabeth WEEKEND POST in English 3 Mar 86 p 5

[Text] The worst locust plague in living memory in South Africa has already cost the country R7 million in locust-fighting measures, Mr Izak Venter, assistant director at the Directorate of Soil Protection, said this week.

The damage the locust swarms have caused to farmers countrywide has not yet been calculated. It is expected to run into millions of rands.

Mr Venter said running costs, transport costs, insecticides and labour to fight the locust plague -- now spread over about 20 million hectares of the country -- had amounted to R7 million so far.

This week 427 control teams were sent out and one helicopter and four aircraft were spraying, he said.

There had been reports that locusts were even attacking mealie cobs in the Orange River area, although this had not yet been confirmed, he said.

The situation in the Northern Cape was now worse than it had ever been, Mr Venter said.

The locust plague -- now in 46 magisterial districts -- has spread as far south as Steytlerville, Willomere, Jansenville, Graaff-Reinet and Somerset East.

New batches of hoppers were breeding in the Northern Cape, mainly in the Fraserburg, Upington and Posmasberg areas, but the breeding appeared to be confined to that area.

This was probably due to the lack of rain and the nights growing colder as autumn approached. The locusts' eggs were less likely to hatch in cold, dry ground.

In any case the average life span of a locust was about 2 1/2 months. This meant that the newly hatched locusts would die off soon.

21 April 1986

## Plague Lightens at Fraserburg

Johannesburg THE CITIZEN in English 20 Mar 86 p 8

[Text] Fraserburg -- The grasshopper plague in the Fraserburg district has diminished somewhat and four Defence Force units helping with the control of plague has been recalled.

The four units have been sent to other areas in the Karoo where the plague is still serious.

## Insecticides Being Replaced With Synthetics

Johannesburg THE STAR in English 18 Mar 86 p 17

[Text] Insecticides used to combat the locust plague are being gradually replaced by a synthetic compound as a precaution against possible harmful effects on workers using the insecticides.

Chief director of regulatory services of the Department of Agriculture, Economics and Marketing, Mr Pikkie Baard said in Pretoria yesterday, the insecticides, Lindane and BHC (benzine Hexachloride) -- organochloride compounds -- were being gradually withdrawn and replaced by pyrethroids, which were a synthetic compound.

## Infertility

Mr Baard said although he agreed with assertions that Lindane and BHC could prove harmful to workers handling the insecticides without protective clothing, there was still no proof these insecticides could cause infertility. However, Lindane and BHC would be replaced by pyrethroids.

Lindane and BHC had not been used on cash crops but on natural pastures, and the incidence of spraying had been very low, he said.

"We have been fully aware of the toxicity of these insecticides on mammals and birds, and that is why it was banned in 1981... It was removed from our list of registered insecticides," Mr Baard said.

## Swarms Build

Since 1975 the Department had a strategic supply of BHC available, and because of the extent of the present locust outbreak, it had no alternative but to use BHC, he said.

Regarding the plague, Mr Baard said two serious outbreaks had been experienced in the Eastern Karoo in the vicinity of Somerset East and Cradock "where we are trying everything to cope with these huge swarms of fliers... And we are doing everything in our power to keep them from entering the lower Fish River Valley.

"There has also been a huge build-up of swarms in Middleburg (Cape) and Venterstad. Those swarms seem to be moving in an easterly direction towards Burgersdorp and Aliwal North along the Orange River," Mr Baard said.

VIETNAM

RICE HISPA PROLIFERATES IN HAIPHONG

Characteristics, Deterrents Reported

Haiphong HAIPHONG in Vietnamese 14 Jan 86 p 3

[Article by Pham Danh Tuyen, of the Vegetal Protection Service: "Rice Hispas and Preventive Measures"]

[Text] Since 1984, the rice hispa has become a disaster for rice planting areas in the city. In Vinh Bao and Tien Land especially, the insect has proliferated in epidemic proportions in the 1984-1985 spring crop. At present, it is causing enormous damage to seedlings of the spring crop in these two districts, with an average density of 40 to 60 insects per square meter, and a maximum density of 200 insects per square meter, primarily adults.

1. Biological characteristics: The adult rice hispa is black with a touch of light brown, and its body has many thorns. The young insect is white and greyish, and turns beige when about to become a chrysalis. The chrysalis is black and brownish. The insect's egg is very small and is laid between the two epidermal layers of a leaf.
2. Living characteristics: The rice hispa is active all day long, but mostly in the morning. When it is sunny, the insect hides on the lower side of leaves. In the cold or when the ricefield is dry and cracked, it hides in cracks. The adult insect is easily attracted by the light of a lamp. Newly hatched insects dig a crooked, 2-to-3-centimeter tunnel through the leaf's stalk. After consuming all the chlorophyll, it digs a way out of the leaf then excavates another tunnel. The insect's metamorphosis into chrysalis takes place in a tunnel.
3. Mode of reproduction: Rice hispa reproduction and development is very complex. The insect's lifespan and reproduction activities are interspersed. In the year, there are primarily three generations causing damages. The first generation, hatched from early March to early April, damages spring rice plants. The second generation, hatched from late May to June, damages 10th-month rice seedlings. The third generation, hatched from mid-August to early September, is the most damaging, the insects being widely distributed and surviving until the end of the crop.

#### 4. Preventive and eradication measures

- a) Application of ricefield sanitation procedures and cultivation methods deterring the insect's rise in host areas. Dead plants and grass-covered embankments are the residences of rice hispas after the harvest.
- b) Manual catching is the basic but most efficient measure. It consists of using a bagging net to catch adult insects in seedlings and rice plants that are multiplying. The field must be irrigated to force the insects to creep to the top of the leaves in order that manual catching can be most successful. This method applied in the morning and at dusk when the young rice plant has four to five leaves can catch as much as 80 percent of rice hispas and other damaging insects. The method is ecologically safe and does not damage the seedling or the rice plant. Seedlings and rice leaves may also be cut off if they carry many young insects.
- c) Chemical spraying: when the density is high (from 100 insects and more per square meter, (vo-fa-toc) [phonetic] 50 percent diluted at 1.5 per thousand or (batsa) [phonetic] 50 percent diluted at 0.2 percent can be sprayed. The amount of chemicals needed is 25 liters of solution per sao (360 square meters).

In the spring crop seedling fields, cooperatives will stick to their planting schedule, bring in water and use nets to catch adult rice hispas. Five to seven days before pulling up seedlings, chemical spraying must be done where rice hispa density is high in order to exterminate the remaining hispas and other types of harmful insects.

#### Eradication Measures Told

Haiphong HAIPHONG in Vietnamese 10 Jan 86 p 1

[Text] As reported by the Vegetal Protection Service, an epidemic outburst of rice hispa is taking heavy tolls in ricefields with four-to-five leaf seedlings in Vinh Bao District. The rice varieties contaminated are the 314, 424, and Indian Strawberry. Some ricefields bases have already been affected, such as in Tan Hung and Dong Minh where the insect's density is 60 per square meter, and as high as 200 per square meter in some places, primarily adult insects. This information has been gathered by the service's investigation and insect watch. To deter and eradicate the insect for the protection of spring crop seedlings and to prevent its spreading to ricefields, the Vegetal Protection Service recommends: 1) That cooperatives respect their plowing schedule, bring or bail out water to the fields, and use bagging nets to catch adult rice hispas, the latter being the basic and most successful eradication measures; 2) that 5 to 7 days before pulling up seedlings, spray chemicals (batsa wopha to x) [phonetic] where the insect density is high in order to exterminate the remaining hispas and other harmful insects in seedlings; 3) that the Vegetation Protection Technical Service Corp cooperate with the agricultural bureau and mass organizations to encourage units to carry out the above measures, primarily in mobilizing all available forces in catching adult rice hispas with bagging nets. [Text] [Haiphong HAIPHONG in Vietnamese 10 Jan 86 p 1] 9458/8918

CSO: 5400/4353

VIETNAM

**TEA CROP INFESTED**

[Editorial Report] Hanoi's agriculture newspaper NONG NGHIEP reported in its 25 February 1986 issue that the "Bunch Caterpillar" (*Andraca Bipunctata*) has caused considerable damage to tea plants in Vietnam's Northern Midlands for a long time.

Years ago, the caterpillars were few and scattered in pockets of a dozen square meters, but recently their density in infected areas has increased significantly. Dozens of hectares in old Phu Tho region have been severely damaged, causing a tremendous impact on the tea production.

/9274

CSO: 4200/843

SURVEY OF TIHAMAH CITRUS CANKER INCIDENCE

Sanaa AL-THAWRAH in Arabic 10 Feb 86 p 10

[Text] The Tihamah Public Development Organization is participating effectively in activities being undertaken to conduct survey and field inspections of citrus trees infected with bacterial canker disease in the Tihamah Plain. This is being done within the framework of the special committee created by ministerial decree number 208 in the year 1985, dated 28/12/85, namely, the Survey and Field Inspection Committee. It is composed of 16 members including environmental protection engineers, orchard agronomists, and delegates from local councils. During a field visit by the correspondent for the agricultural page [of AL-THAWRAH] to projects of the Tihama Public Development Organization, he met with brother Engineer Abduh Fari' al-Rima' project, and deputy chairman of the Survey and Field Investigation Committee, who discussed the tasks and activities of the Committee. He said:

The ministerial decree defined the tasks of the Committee as being to conduct a comprehensive survey and field investigation of all the citrus farms and trees; their number, species, age, and whether they are infected with the bacterial canker disease, and likewise the sources of its introduction to the farms. The committee began to conduct its work on 14 January 1986 by doing the following:

1. Establishing contact with al-Hudaydah Governorate and informing them of the Committee's intent to pursue its work. Then, notices were issued from the governorate to all of the regional public administrators and brother local council heads instructing them to cooperate with the survey and facilitate the tasks of the committee.
2. The Tihamah Plain was divided into three principal regions. The first runs east to west from al-Jum'ah to the area adjacent to Bayt al-Faqi to al-Qanawis. The third region runs from al-Qanawis to the northern borders of the Republic in the Tihamah Plain.
3. The members of the committee have been distributed into seven survey teams, with a portion of each of the principal regions allocated to each team.

Each team will subdivide its region into daily work zones, in order to visit each of the farms located within its region, and to complete a systematic inventory with the help of whoever is present during its visit to the farms.

Regarding the villages the teams encounter during their survey, if they are small villages, the survey will be conducted house to house during their visit. If the village is medium or large, we will enlist the assistance of brotherly rural guidance bodies. However, in regions where there are no such bodies, the team will conduct the survey.

To prevent repetition in the survey, each team will be equipped with a container of "ranj" (as published) to make a mark on the farm or residence which has been surveyed. This prevents redundancy and repetition in the recording. Likewise, in order to prevent the spread of the disease by way of the survey, the team will be required to do the following:

1. Leave the vehicle which transported them at a far distance from the farm, not less than 200 meters.
2. During testing of the infected farms, no piece of a plant will be transported or moved from within this infected farm. It will be ensured that nylon gloves will be worn before touching the infected tree. The nylon garment will be disposed of or sterilized after leaving the farm.
3. It will be ensured that hands and boots will be sterilized in lavatories directly after leaving the infected farm.

Concerning the results of the survey and the problems encountered by the committee, he said:

We completed the first zone on Wednesday, 22 January 1986, and then we moved on to the second region, and as of 2 February 1986 we had completed coverage of the region from Bayt al-Faqih to the Sanaa--al-Hudayah road, and since 1 February 1986 some of the teams have begun to work on some of the zones north of the San--al-Hudaydah road to al-Qanawis. We expect to finish with the second region during this week, on 8 February 1986.

Concerning the results, 1,294 farms have been covered as of the end of 1 February 1986. The preliminary results of the survey indicate that the percentage of infected trees is in the range of 9-10 percent of the total number of trees and seedlings which have been tested so far, which amounts to approximately 24,000 trees and seedlings of various ages and species of citrus. With regard to the difficulties, the truth is that we cannot call the difficulties which confront us difficulties in the normal sense of the word.

All of the farmers cooperated with us on the survey, as did the brother district public administrators, the heads and members of local councils, and the tribal and clan chiefs. However, the only difficulty was the unavailability of detailed maps with which we could find each village whether small or large. Therefore, we were guided along many dirt and gravel or unpaved roads.

In that regard, each team returns at the end of the day having collected a large sum of names of villages and various areas which it visits, and this delays the speed with which the survey is conducted, and thus hinders the operations which are to follow.

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CSO: 5400/4509

END