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# Worldwide Report

EPIDEMIOLOGY

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WORLDWIDE REPORT  
EPIDEMIOLOGY

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COMBATING TRYPANOSOMIASIS IN KWANZA NORTE

Luanda JORNAL DE ANGOLA in Portuguese 3 Oct 84 p 2

[Text] The fight against sleeping sickness, the scientific name of which is trypanosomiasis, which has been included in the emergency health plan, continues in the province of Kwanza Norte, where some cases of this illness have been discovered.

The emergency plan for this year in the province embraces only the municipalities of Cambambe Alto.

According to Provincial Delegate, Belarmino Lemos, "as of last August the provincial brigade fighting endemic diseases, which began work in the municipality of Cambambe, had examined 9,574 persons in the commune of Zenza-Itombe and Massangano and found 228 people suffering from the disease. They were given medical treatment."

The brigade will move on to the municipality of Golungo Alto when it has finished its work in Cambambe.

According to Belarmino Lemos, the work in Cambambe would have progressed much faster if the brigade had had a second vehicle at its disposal. Two are needed, since one would be used for the diagnostic team and the other for treatment. "Nevertheless the two tasks are carried out with a single vehicle, which slows the work down."

On the other hand, during the current year, according to investigations carried out in the province of Kwanza Norte, cases of trypanosomiasis were discovered, as well as malaria, tuberculosis, and leprosy, in the municipalities of Pango Aluquem (which was recently detached from the province), Golungo Alto, and Cambambe.

The provincial delegate of the Ministry of Health for Kwanza Norte added that the plan envisions the examination of 80 percent of the population in each municipality. He explained that this could be accomplished if there were sufficient vehicles and if no other difficulties arose, since "we have the technicians, equipment, and medications in reasonable quantities so that the work can be carried out successfully."

BARBADOS

BRIEFS

MOSQUITO CONTROL SUCCESSES--THERE has been less and less of Aedes Egypti mosquito because of the clean-up drive by the Ministry of Health. This was stated yesterday by the Public Health Inspectorate. The Aedes Egypti findings for January to March this year totalled 1.33, when compared to 1.77 for the corresponding period of last year. The April to June index was down to 0.54 this year from 0.70 for the same period of last year, while for July to September this year, the inspectorate recorded a 1.38 Aedes Egypti finding against a 2.36 index for those months in 1983. Chief Public Health Officer, Charles Browne, said yesterday that the mosquitoes were found mainly along the coastal areas of the island, particularly in the Black Rock, St. Michael district, and along Oistins coast, in Christ Church. He said their breeding places were often low-lying water-filled areas. Dengue and yellow fever are the two major diseases, caused by the mosquito. [Text] [Bridgetown THE NATION in English 18 Oct 84 p 3]

CSO: 5440/010

BRITISH VIRGIN ISLANDS

BRIEFS

DENGUE FEVER OUTBREAK--The Public Health Department has received the second report in less than two months concerning outbreaks of dengue types one and two in three neighbouring islands. In light of this problem, the regional office, Pan American Health Sanitary Bureau, has called on the Health Department in the region to intensify the activities of their Aedes Aegypti Eradication Campaigns. Dengue--a disease which is transmitted from person to person, is caused by the bites of infected Aedes Aegypti mosquitoes. The latest mosquitoes surveillance report conducted here, shows an increase in the number of Aedes Aegypti mosquitoes. To help reduce this incidence, the Environmental Health Unit has stepped up its house-to-house inspection programme and is fogging nightly in various communities on Tortola. However, these measures alone are not enough. The cooperation of the general public in carrying out simple but very effective control measures is absolutely essential. [Excerpt] [Road Town THE ISLAND SUN in English 20 Oct 84 pp 1, 2]

CSO: 5440/012

UPDATE ON SPREAD OF CHOLERA IN CAPITAL, FIGURES GIVEN

Ouagadougou CARREFOUR AFRICAN in French No 852, 12 Oct 84 pp 19-22

Article by Clement Tapsoba: "Cholera Situation Is Satisfactory"

Excerpts When where and how did the first outbreak of cholera occur in our country this year? What is being done to combat the disease? Which sections of the capital are most affected? In short, what is the situation as of 18 September?

Competent health department services have been convinced of it for some time: the disease was introduced into our country in the north by a neighboring country and later spread to the capital.

The first case of cholera was recorded 17 June in Dori, a province of Selon, where a 40-year-old man from a border village expired the day of his admission to the hospital medical center.

The spread of the disease was already well underway. Another pocket was discovered shortly thereafter in Seytenga, a village located a few kilometers from Dori, where about a hundred cases were reported.

It was not until 26 August that cases of diarrhea and vomiting began to be recorded in the capital; more specifically in the Tanghin quarter north of Ouagadougou, then in Boughin and Sambin-barrage quarters. Most quarters, however, were quickly affected to different extents (see table); this made it possible to confine the illness to the north and northeast areas of the capital.

In the first week following the outbreak of the disease in the capital, 90 cases were recorded at Yalgado Ouedraogo Hospital, 8 of them fatal (or, 8.9 percent fatal). In the second week, there were 314 cases with only 4 deaths, or 1.3 percent. Finally, 180 cases were recorded in the third week, including 3 deaths. The total number of suspected cases recorded at Yalgado Hospital between 26 August and 18 September is calculated at 626 (15 fatal). Of these 626 cases, however, 200 laboratory tests of patient stool samples confirmed 50 cases of cholera, or 25 percent of the cases. The lack of organization and facilities at the hospital during the first few days partially explains the 8.9 percent mortality rate recorded for that period. The current overall

mortality rate as of 18 September is 2.39 percent. Compared to the 1971 epidemic, whose peak mortality rate was 21 percent, experts do not consider the situation catastrophic. Moreover, the 2.39 percent rate could very well drop during the next few days. The optimism exhibited by the Emergency Committee to Combat Cholera, set up 27 August (that is, as soon as the disease was confirmed in recorded cases), is explained by its choice of strategy to combat the disease. In accordance with the strategy adopted, the government decided to make just over 2 million available from the state treasury to meet the committee's needs. It also decided to postpone the CNR /National Revolutionary Council/ support march that the CDR /Committee for Defense of the Revolution/ was planning on 3 September in order to circumscribe the spread of the disease. At the same time, the city's nine health teams were equipped Monday, 3 September with Fanasil tablets recommended for the prophylaxis of cholera, at 25 francs a tablet instead of the usual price of 600 francs per six tablets.

Furthermore, health agents were assigned the task of administering appropriate antibiotics to travelers entering the city. Once the hospital recovered from the initial surprise, facilities were provided for the patients: five army tents and toilets were made available, away from the buildings.

Sanitation and Hygiene Department authorities undertook the project of disinfecting wells, patient living areas, etc. Accordingly, 192 wells and 126 living areas were disinfected with the assistance of neighborhood CDR's by 18 September. This operation, according to comrade Alassane Derme, chief of the sanitation service under the Department of Health and Sanitation Education, made it possible to verify that the districts concerned were the very same ones in which most recorded cases of cholera originated. It is highly significant that districts like Tanghin or Sambin-barrage, classic low-income sections of the city where the most vulnerable segments of the city's population are concentrated, would be centers of cholera. Just as in Zogona 10 years ago, this year's experience has once more confirmed that the outlying districts, generally not divided into lots and lacking adequate infrastructures, encourage the development of contagious diseases. In undertaking the division of these zones into individual lots, the CNR intends to break a link in this chain. Still, it is obvious that the success of the fight against all forms of disease depends on good health education and on a general increase in awareness through the strict observance of hygienic practices.

Distribution of Cholera Cases by Area From 26 August-17 September  
in Order of Importance

I--Districts with 21-71 cases

<u>Number rating</u>	<u>District</u>	<u>Cases</u>
1.	Tanghin	71
2.	Gounghin	49
3.	Sabin-Barrage	25
4.	Zogona	24
5.	Dassasgo	21

II--District with 10-20 cases

<u>Number Rating</u>	<u>District</u>	<u>Cases</u>
1.	Koulouba	19
2.	Tampoui	16
3.	Noncin	16
4.	Kalgondin	14
5.	Zangoetin	14
6.	Dagnoen	14
7.	Dapoya II	14
8.	Wemtinga	13
9.	Widi	12
10.	Palemtinga	11
11.	Larle	11
12.	Tiedpalogo	10
13.	Cissin	10
14.	Saint Camille	15

III--District with 5-9 Cases

<u>Number rating</u>	<u>District</u>	<u>Cases</u>
1.	Samandin	8
2.	Kamsaonghin	8
3.	Wayalguin	7
4.	Kolog-naba	7
5.	Nonrguin	7
6.	Bilbambilin	6
7.	St. Gabriel	6
8.	Nemnin	5
9.	Kossodo	5
10.	Hamdalaye	5

IV--Districts with 1-4 cases

Number of Quarters: 47

Source: HYO authorities

9825

CSO: 5400/20

## INCREASE REPORTED IN HERPES INFECTION INCIDENCE

Toronto THE GLOBE AND MAIL in English 16 Oct 84 p 14

[Article by Dorothy Lipovenko]

[Text]

The incidence of herpes virus infection in Canada jumped 64 per cent between 1982 and 1983, with babies under six months showing the largest increase.

Figures to be released this week by Ottawa's Laboratory Centre for Disease Control show more than 10,200 reports of herpes virus infection last year. In almost half the cases (47 per cent), the genital tract was identified as the site of the infection.

"It may seem that we're looking at a straightforward epidemic," Dr. Gordon Jessamine, chief of the field epidemiology at the Department of Health and Welfare, said in an interview yesterday.

But he cautioned that greater public concern about genital herpes — and visits to physicians — are responsible for the increase in reports.

The federal figures indicate that the incidence of genital herpes has been increasing steadily since 1981 and 1982, when it accounted for almost 41 per cent and 42 per cent of the total number of herpes virus reports.

Since 1978, when the federal Government began keeping track of all herpes virus reports (which includes infection from cold sores on the mouth) the number of reports to Ottawa has jumped to more than

10,000 last year from 1,500.

While referring to genital herpes in adults as "a nuisance problem," Dr. Jessamine said the incidence of herpes infection in infants is "very serious."

Infants can become infected during the birth process if the mother has genital herpes, either from a previous history of the disease or because she was infected by her partner.

An infant exposed to the disease can get skin infections, encephalitis (inflammation of the brain which can impair motor function and cause mental retardation) or an infection that spreads to the kidneys, liver and lungs which is fatal.

Dr. Jessamine said in an interview yesterday that he wants to see an improved monitoring system to detect neonatal herpes, including mandatory screening in the last weeks of pregnancy of those women with a history of genital herpes.

To avoid the risk of infecting an infant, he said pregnant women with genital herpes should be delivered by Caesarian section.

The federal Government's bureau of microbiology compiled its figures on herpes virus infections from reports received from the 24 World Health Organization laboratories across Canada.

But the data "does not reflect the

true incidence of herpes virus infections in Canada" because there is no differentiation made between new infections and repeats, Ottawa's disease centre said in a covering brief on the herpes figures.

Almost half of the reports come from Ontario, followed by British Columbia (16 per cent), Alberta and Manitoba (each with 12 per cent), the Atlantic provinces (5.5 per cent), Saskatchewan (3.6 per cent) and Quebec (2.5 per cent.)

Young adults were the group most frequently infected with genital herpes. Men and women between 20 and 34 years accounted for 72 per cent of the genital tract infections.

The number of reports of genital herpes affecting women increased 81 per cent from 1982 and reports of male victims increased by 57 per cent.

There were 19 deaths, including of some infants, among the 4,100 reports where outcome from the disease was specified.

The largest number of genital herpes reports are made in May, June, July and August, which is consistent with the seasonality of gonorrhoea in Canada.

He said physicians see seven or eight cases of herpes for every one or two patients with gonorrhoea.

## BRIEFS

EDMONTON SYPHILIS RATE--EDMONTON (CP)--Health officials are baffled by the rapidly rising incidence of syphilis in Edmonton, Alberta Health Minister Neil Webber says. Some 84 new cases were reported between June 1 and Sept. 30. Tracking down the carriers and getting them into clinics for treatment is a real problem, Webber said. He said he doesn't know what else can be done about the problem, although the disease is serious enough that he expects some of the people suffering from it to end up in mental health clinics several years from now if they don't seek treatment. [Text] [Toronto THE TORONTO STAR in English 3 Oct 84 p A10]

DROP IN TUBERCULOSIS CASES--OTTAWA (CP)--The number of reported cases of tuberculosis fell to another record low in 1983, Statistics Canada says. A total of 2,356 new active cases or reactivated cases of the disease were reported last year--9.5 cases for ever 100,000 Canadians. In 1982, there were 2,472 cases for a rate of 10.0 cases for every 100,000 people. Caused by bacteria that attack the respiratory system, tuberculosis is most common in areas of poor living conditions. In 1983, 467 of the cases were among Indians and Inuit and 859 cases among immigrants. [Text] [Toronto THE GLOBE AND MAIL in English 10 Oct 84 p 11]

CSO: 5420/7

## BRIEFS

HEPATITIS STATISTICS--So far this year health authorities have reported 2,000 cases of hepatitis throughout the country, and have found that 63 out of every 100,000 of the country's residents will suffer an attack of this illness. A document prepared by Drs Willy D. Carrillo Angulo and Manuel Francisco Guido Camacho, of the Department of Epidemiological Alert [DVE] of the Ministry of Health shows that during the first half of 1984 there were 1,551 cases, a number which has grown during the last 2 and 1/2 months due to outbreaks in different regions. Up to the time of the hepatitis outbreak, of which the population has been warned, the most seriously affected region had been Brunca, with a rate of 155 victims per 100,000 inhabitants. The least affected region continues to be Chorotega, with a rate of 43.5 cases per 100,000. Drs Carrillo Angulo and Guido Camacho also noted that the cantons of San Mateo and Guatuso, belonging to the region of Huetar Norte, did not report a single case. The number of cases reported by each region is as follows: Central Region, 443; Huetar Norte, 410; Chorotega, 135; Huetar Atlantica, 198; and Brunca, 365. The 10 cantons with the greatest number of cases were Coto Brus (131), San Jose (116), Perez Zeledon (108), Heredia Center (74), Grecia (69), Alajuela Center (67), Goicoechea (66), Desamparados (54), Cartago and Buenos Aires (each with 44 cases). [Excerpts] [San Jose LA REPUBLICA in Spanish 16 Sep 84 p 3] 9839

UNUSUAL INTESTINAL PARASITE ENCOUNTERED--A strange parasite of the Raillietina genus has been found in five persons residing in the province of Puntarenas, specifically in the community known as Palmira de Montes de Oro, Miramar. Dr Rodrigo Brenes Madrigal, professor at the University of Costa Rica (UCR) and a well-known scientist, explained that reports of this type of parasitosis in man are very rare. Strangely enough, in 1983 Dr Brenes, together with Drs Eduardo Monge, Gerarda Rodriguez and Rodrigo Loria, discovered the first case in Costa Rica and the second in Latin America. On that occasion the parasite was found in a 2-year-old girl, coming from that area, who entered the Dr Carlos Saenz Herrera Childrens Hospital with abdominal pain associated with periodic diarrhea, with around five liquid movements a day and occasional fever. After numerous analyses, Brenes Madrigal proved that the child had a parasite of the Raillietina sp. type. Despite his 30 years' experience in studying helminths in different countries, and especially in Costa Rica, "he never had had the opportunity to observe the spontaneous elimination by a person of rings or segments laden with the eggs of that strange organism, which look like grains of rice." The appearance of this parasite was published in ACTA MEDICA magazine, and the case was presented to the Fourth National Congress on Microbiology, Parasitology and Clinical Pathology, which took place in San Jose some years ago [as published]. [Excerpts] [San Jose LA NACION in Spanish 3 Sep 84 p 17A] 8131

## BRIEFS

NEW CHIEF MEDICAL OFFICER--Dr. Enid Denbow is the new Chief Medical Officer in the Ministry of Health. She succeeds Dr. Walter Chin, who leaves the country today for Trinidad and Tobago, where he takes up an appointment as Country Representative of the Pan American Health Organisation/World Health Organisation (PAHO/WHO) in that country. At a farewell ceremony at the Ministry of Health headquarters in Brickdam yesterday Dr. Chin said: "I go as a representative of Guyana...I have to remember that I am a Guyanese first and last." He also expressed the hope that his appointment to such a senior post within the international organisation, would serve as "a spur and a beacon" to other Guyanese both within and outside the Ministry. Health Minister Dr. Richard (?Van) West-Charles, who was among those bidding farewell to the Chief Medical Officer, said of him: "I know that for him Guyana is always home...he is truly a Guyanese." The Minister confirmed his confidence in Dr. Chin by adding: "What goes with him is the flag of Guyana and I know that he will make us proud." Dr. Claudette Harry is now Deputy Chief Medical Officer and Dr. Leslie Mootoo is Medical Superintendent at the Georgetown Hospital. [Text] [Georgetown GUYANA CHRONICLE in English 20 Oct 84 p 4]

CSO: 5440/013

## VIRUSES CAUSING HEPATITIS OUTBREAKS STUDIED

New Delhi PATRIOT in English 8 Oct 84 p 5

**[Text]** Hepatitis virus non-A non-B is emerging as one of the major causes of Hepatitis in the country, recent research has indicated, reports PTI.

Scientists at the All India Institute of Medical Sciences (AIIMS) have found Hepatitis virus non-A non-B as a significant factor for Hepatitis epidemics in three districts of Haryana, two of Uttar Pradesh, one of J and K, three of Gujarat and some areas of Delhi during the last three years.

Hepatitis commonly presents as jaundice, which spreads in an epidemic form. Besides six to eight weeks' absence from work, it may cause acute liver failure and chronic illness, ultimately leading to death due to cirrhosis or cancer of the liver.

The other two main groups of viruses responsible for this disease are Hepatitis virus A and Hepatitis virus B.

Investigations by the researchers have also revealed that non-A non-B virus is an important cause of sporadic Viral Hepatitis.

The water-borne non-A non-B Hepatitis may be fatal, specially among pregnant women, the AIIMS researchers say in a report submitted to the Ministry of Health and Family Welfare.

The recent epidemic in Baroda and Ahmedabad was also due to Hepatitis virus non-A non-B, investigations by the National Institute of Virology, Pune, have shown.

The AIIMS scientists point out that, unfortunately, knowledge on biophysical, biochemical and immunological characteristics of Hepatitis virus non-A non-B is rudimentary.

Hence, it is not possible to adopt dependable and scientific preventive measures as is possible in the case of Hepatitis virus A and Hepatitis virus B.

They have suggested that treatment of drinking water can prevent most of the water-borne infections and may also check spreading of non-A non-B virus.

Further, they have recommended administration of normal immuno-serum Globulin manufactured from local sources to help protect individuals and the high risk groups like pregnant women.

CSO: 5450/0023

## BRIEFS

GASTROENTERITIS DEATHS REPORTED--Gorakhpur, Oct 20 (PTI)--At least 19 people, including women and children, have died and 56 cases of seizure of gastro enteritis were registered in village Bansgaon in Sadar tehsil during the past fortnight, according to the deputy chief medical officer here today. [Text] [New Delhi PATRIOT in English 21 Oct 84 p 1]

JAUNDICE IN GUJARAT--JAUNDICE DEATHS (Rajkot, UNI)--The killer jaundice has claimed 32 lives with the death of two patients in Rajkot on Monday. According to official sources, 25 people had died in the Civil hospital while seven children had died in the Government children hospital during the past six months. In all 756 cases were admitted in the two hospitals during the period. Twenty-nine people were still under treatment in the two hospitals, the sources added. [Text] [Bombay THE TIMES OF INDIA in English 24 Oct 84 p 4]

TETANUS CASE REPORTED--Calcutta, Oct. 24--The Calcutta Medical College hospital authorities have refused further admissions in the emergency ward following evidence of a tetanus case in the male casualty ward. Hospital sources said that burn injuries of one Sankar Sardar (23) showed signs of tetanus infection. It is learnt that it would take at least a week to disinfect the entire ward after which admissions will be resumed. Sankar Sardar was rushed to the Infectious Diseases Hospital where his condition was described as critical. [Text] [Calcutta THE TELEGRAPH in English 25 Oct 84 p 2]

BIHAR CHOLERA, DIARRHEA--Patna, Oct. 5.--The death toll in the recent outbreak of diarrhoea and cholera in Bihar rose to 538, with more than 176 deaths reported from Nalanda district during the past month, reports UNI. The State Harijan and Adivasi Welfare Sangh president, Mr B. Bishnudev, who returned here on Wednesday after conducting a survey in the flood-affected areas of Nalanda said that at least 300 people, including the 124 reported earlier, had died in the district last month. About 1,002 people had been affected he added. Earlier, a Motihari report quoting the district civil surgeon had said about 38 people died on diarrhoea in east Champaran district. Official sources in Patna confirmed about 100 deaths in Muzaffarpur in three months. At least 200 people have died of diarrhoea after consuming "poisonous atta" distributed as relief material in flood-ravaged Sitamarhi district, according to official reports. The reports said that "rotten wheat" had been supplied to the consumers through fair price shops leading to the tragedy. [Excerpt] [Calcutta THE STATESMAN in English 6 Oct 84 p 9]

BIHAR GASTROENTERITIS DEATHS--Patna, Oct. 7.--Altogether 100 people died of gastro-enteritis in Muzaffarpur district of north Bihar between June and September in the wake of three spells of floods in the district, according to an official report received here, says PTI. The Home Commissioner, Mr N. K. Agarwal, said yesterday the deaths had resulted from eating of putrefied fish, stale food and drinking of contaminated flood water. DPA adds: At least 18 people have died in an outbreak of gastro-enteritis in southern Nepal, reports UNI quoting the official Nepalese news agency, RSS. The disease has claimed more than 100 lives in different parts of Nepal this year. Officials blame poor hygiene and contaminated drinking water for the spread of the disease. [Text] [Calcutta THE STATESMAN in English 8 Oct 84 p 7]

CSO: 5450/0022

HEALTH SERVICES STRIVE TO COPE WITH PERSONNEL CUTS

Kingston THE DAILY GLEANER in English 25 Oct 84 pp 1, 3

[Text] The island's hospital services have been reeling under the pressure of reduced staff with wards being closed, meals being late and the cleaning of wards severely hampered. The situation has been described as "grave" in some hospitals.

Because of the reductions in some categories of workers, some nurses are being called upon to carry out duties normally undertaken by the ancillary staff as they try to care for the patients.

Citizens in some rural areas demonstrated over the week-end and on Tuesday against the reduction of services in the hospitals in their communities. As a result of this a delegation from Eastern St. Thomas headed by Member of Parliament, the Hon. Pearnel Charles, will meet with the Minister of Health, Dr. Kenneth Baugh, this morning at 10 o'clock to hear plans for the health service in that parish.

The announcement of the rationalisation of hospitals including those in St. Thomas caused a demonstration over the week-end by persons who use the Issac Barrant Hospital. The meeting was requested by Mr. Charles so that plans for the parish could be outlined. Mr. Charles said on Tuesday that he was assured by Dr. Baugh that there was no plan to close the hospital. Instead the changes should improve the standard of services to the people.

Rural hospitals seem to be the most affected by the lay-offs as some have had to close wards in order to reduce the pressure on the remaining members of staff. Ancillary workers are the main ones affected in the Government's redundancy programme to remove "excess" posts in the various ministries. The reduction in staff has been affecting ward services and meals have been reaching the patients late. In fact, in at least one hospital some of the hospital maids have been assisting with the cooking of meals because there is only one cook. This has resulted in a reduction in the menu in order to cut down on the work load for the cook.

At the Percy Junor Hospital where 31 persons were laid off, two wards, a male and a female, were closed because there were not enough staff to work on the wards, in the kitchen and laundry. Patients who could go home were

told to do so while others were moved to other wards. Only one cook is in the kitchen to prepare the meals and she has to be assisted by the hospital maids at times. This situation has led to a reduced menu, informed sources said.

Sanitation at the hospital has also been affected in that there is no one to clean up the grounds and tidying of wards is also hampered. Informed sources said that the staff was working "under strain" and that they were doing their best. The remaining porters who have not been assigned to specific areas are trying to deal with the situation but at nights the pressure is great when there is only one on duty. Ambulance attendants were working under stress as they could not be paid for overtime.

Since this week there has been a reduction in the number of persons attending the out-patients department and this has been attributed to the existing conditions at the institution. Patients are now going to nearby clinics instead of the hospital.

"Grave," was how sources at the Chapelton Hospital in Clarendon described the situation where 28 ancillary workers were laid off on Monday. A female ward, the Elizabeth Ward, had to be closed because of the cut-back in staff. Nurses had to be doing "a lot of work." They have to help to do the tidying up of the wards as only one maid is assigned to each ward and sometimes she has to serve two areas. Workers were said to be trying to see how best they could carry out their duties but it was strenuous.

Twenty workers--porters, drivers, maids and records officers--were sent off at the Black River Hospital in St. Elizabeth where ward services have been affected. Workers are unable to cope with the situation which is compounded by a shortage of nurses. The GLEANER understands that the nurses have to be preparing feeds on the Children's Ward and a decision has been taken to discontinue this. Normally feeds are prepared by the ward assistants. Porter service is affected as there is only one porter on the night shift. A second group of workers is expected to be laid off tomorrow.

A similar situation prevails in the Kingston institutions hit by the lay-offs. At the Kingston Public Hospital sources said the lay-off was having a "disastrous effect" on services. "Hospital attendant services cannot be worse," sources said, adding that patients' meals were not being served on time and that general sanitation had been affected.

There were "very severe problems" in relieving staff at the National Chest Hospital where they "merely" had enough persons to man the service. The situation becomes worse when people have to get a day off. Despite the problems workers there were trying to cope with the situation.

The cut-back in the number of ward assistants at the Bustamante Hospital for Children has resulted in greater pressure being placed on the already limited number of staff nurses. The nurses have to run errands such as taking specimens to the laboratory when there are no ward assistants to do so. Sometimes when the ward assistants have to take patients to other institutions for treatment, nurses are left to feed and tidy the children.

The pressure on the nurses is aggravated by the fact that no part-time nurses can be employed to ease the work load. Nurses are refusing to do overtime because they say they are tired. Sources said the situation was of concern as they were dealing with children who needed a lot of attention. The sources cited a situation where in one day 22 patients were admitted on one ward with nine of them being asthmatics.

The Bellevue Hospital was experiencing problems but they were trying to cope by a readjustment of staff in order to have an even distribution throughout the system. Sources there said the situation had not reached alarming or crisis proportions. The hospital had been operating with a shortage for sometime but this had been aggravated by the recent reductions in staff.

And as the lay-off of workers took its toll on the Buff Bay Hospital hundreds of placard-bearing citizens on Tuesday blocked the main road from Kingston to Port Antonio in western Portland, affecting vehicular traffic for more than five hours. Demonstrators were protesting against the announced scaling down of services at the hospital. They blocked the road with old cars and debris.

CSO: 5440/014

## BRIEFS

TYPHOID FEVER CASE--The Medical Officer of Health for the parish of St. Ann has reported that a case of typhoid fever had been discovered in the Blackstonedged area of the parish recently. According to the M.O.H. Mr. David Baxter, this case of typhoid involves a young girl and it is most worrying to have cases such as this in a parish where tourism development is taking place. Dr. Baxter who made the disclosure during Thursday's monthly meeting of the St. Ann Parish Council noted that the main cause of typhoid in Blackstonedged was the lack of Public Health Inspectors, the lack of potable water supplies, the lack of proper excreta disposals and also poor food hygiene. He also said that a similar case was discovered last year in this same area. The Council in its response has asked that the Health Department prepare a statement on what can be done to improve conditions in this area as well as an estimate of the cost for carrying out this improvement. [Text] [Kingston THE DAILY GLEANER in English 25 Oct 84 p 4]

CSO: 5440/014

MALAYSIA

BRIEFS

SARAWAK TYPHOID DEATHS REPORTED--PASIR PUTEH, Friday--Two people from this district have died of typhoid, a spokesman of the Medical Office here said today. They were among the 96 people who were confirmed to be suffering from the disease in the district since last month, he said. He said the two victims were housewife, one from Kampung Wakaf Berangan and the other from Kampung Kelubi near here. The woman from Kampung Wakaf Brangan died in the Jertih district hospital last month while the other died in the Kota Baharu general hospital last week, he said. [Text] [Kuching SARAWAK TRIBUNE in English 13 Oct 84 p3]

CSO: 5400/4319

## TYPHOID, GASTROENTERITIS OUTBREAKS

Mexico City EXCELSIOR in Spanish 6 Oct 84 p 33-A

[Article by Manuel Lino R.]

[Text] Ecatepec, 5 Oct--Due to the negligence of the Valley of Mexico Water Commission residents of this municipality have been afflicted with typhoid and gastroenteritis as a result of a shortage of drinking water and of the very poor quality of the water being furnished them "provisionally."

Farmers of the Venta de Carpio settlement headed by Arturo Torres have reported that "20 days ago the water service was cut off. This has caused serious cases of those diseases as in the case of elementary school Carlos Hank Gonzalez where several children have become ill with infections due to the lack of drinking water and to the very bad quality of the water being furnished provisionally."

Representatives of some 500 families said they went to the mayor's office but were told that the matter "is not within their competence." They were sent to the Valley of Mexico Water Commission, northern area system, where they were told that "the problem will go on for another month because maintenance work is being done on the well in Chiconautla which supplies the water to the Venta de Carpio settlement."

The complainants also reported that in spite of the grave problem they are experiencing, water is brought in tanks only sporadically and only as far as the entrance to the settlement. Therefore, the schools in the area do not receive a supply of water. This results in the toilets and baths being in deplorable condition which causes grave danger to the school children.

In conclusion they said that they have ascertained that no maintenance work is being done on the well at Chiconautla. "This has created considerable uneasiness among the people and we have decided to undertake a march on the city of Toluca where we--some 500 sick and thirsty families--will go and explain our problem to the governor."

9204

CSO: 5400/2005

INCREASE NOTED IN NUTRITIONAL DISEASES

Kaduna NEW NIGERIAN in English 31 Aug 84 p 1

[Article by Akinyemi Taiwo]

[Text]

**KWASHIOKOR and Marasmus — diseases of protein deficiency — are on the increase, according to doctors at the Ahmadu Bello University (ABU) Teaching Hospital, Kaduna.**

**The disorders which result from Protein Calorie Malnutrition (PCM) mostly affect children who, in severe cases, may be permanently retarded. Marasmus, however, could occur due to old age.**

Informed sources at the hospital said the increase in the number of cases reported at the hospital was due to the spiralling cost of baby foods. More than 12 children are now on admission at the hospital suffering from severe cases of

the two diseases.

Dr. Hamidu Ahmed who is treating the children said only severe and complex cases were admitted in the hospital for lack of accommodation, while the rest were sent to the hospital's nutrition clinic. The clinic runs checks on discharged children and a daily session for mothers on the essence of a balanced diet.

A market survey showed that a 450 gram tin of 'similac' powdered milk that sold for 450 Naira four months ago now sells at 8 Naira, while a similar tin of 'S.M.A.' baby food sells for 10 Naira instead of 4 Naira four months ago.

Acting Head of the Department of Paediatrics at the hospital, Dr. M.O. Ojo while commenting on the activities of the clinic said "it is one thing to instruct them (mothers) to give their children eggs everyday. Much depends on their financial standing."

She added that "whether the economy is 100 per cent okay or not, there will always be cases of malnutrition as much depends on the mothers because there are mothers who do not know how to feed their children properly."

Dr. Ojo however, implored the government to restore adequate supply of pap and milk in the hospital.

CSO: 5400/10

SLEEPING SICKNESS REPORTEDLY RESURFACING

Kaduna NEW NIGERIAN in English 31 Aug 84 p 1

[Article by Dupe Motojehi]

[Text]

THE Nigerian Institute for Trypanosomiasis Research (NITR) Kaduna has no fund to conduct field surveillance to contain the spread of tse-tse fly in the country. Result is that sleeping sickness is re-surfacing where it had been eradicated.

Director of the institute, Alhaji Yakubu Magaji told the New Nigerian in Kaduna yesterday that the institute gradually started to reduce field operations in 1973 and was now completely grounded.

The director said the situation was not in the interest of the nation especially now that pockets of the deadly flies had re-surfaced in areas that had earlier been declared free of them.

He said the NITR feared the

possibility of an epidemic of the disease occurring in the country in the near future, adding that this would be disastrous as there were no adequate ecological reports on the features and characteristics of flies found in the forest areas.

According to the director, now that 20 persons have died of sleeping sickness in Bendel State, the chances of a spread to the forest zone has increased.

He said although the institute had done extensive research on the 11 species of tse-tse flies found in the northern parts of the country including Benue, Kwara and Niger, to contain the disease throughout the country without adequate survey was difficult.

He said a team of experts from the NITR would be mobilised to the affected areas of Bendel State as soon as fund was available.

CSO: 5400/10

CAMPAIGN AGAINST RIVER BLINDNESS INITIATED

Kaduna NEW NIGERIAN in English 13 Sep 84 pp 1, 13

[Text] NIGERIA has been divided into five zones for the purpose of carrying out the national campaign against river blindness, Dr. J. A. Odetoyinbo, project manager of the National Onchocerciasis control programme, has said.

He told the News Agency of Nigeria (NAN) recently in Lagos that the campaign would initially focus on the area within a radius of 250 kilometres of the federal capital, Abuja and eventually cover the whole country.

Dr. Odetoyinbo said that the campaign which is to be officially launched last year, would have its operational base in Kaduna.

He pointed out that the programme was already carrying out preparatory work and that this included aerial surveys of the breeding sites of blackfly which transmits the disease.

The project manager said that the programme had already spent 238,000 Naira on the aerial surveys, adding that the Nigerian Institute of Trypanosomiasis Research was gathering data on the epidemiology of the disease in Nigeria on behalf of the programme.

The Federal Government voted one million Naira for the programme each year beginning from 1981 to 1983 although a meeting of Nigerian experts in 1981 estimated that a five-year programme would cost 40 million Naira.

A survey carried out between 1973 and 1975 in the former North-Eastern State showed that one of every five persons surveyed had the disease and the Federal Ministry of Health had also said that the disease was wide-spread in Nigeria.

River blindness is a filarial which affects the eye, the skin and the general region causing severe itching and skin rashes and leading to blindness in about three per cent of its victims. Because of the prevalence of blackfly in the federal capital territory, Abuja, a campaign against the disease was started in the area a few years ago.

CSO: 5400/10

## RIVER BLINDNESS REPORTED IN GONGOLA STATE

Kaduna NEW NIGERIAN in English 22 Sep 84 p 7

[Text]

**CASES of river blindness are still rampant in Gashaka Chieftdom in Sardauna Local Government of Gongola State, the Chief, Alhaji Hammangabdo Muhammad Sambo, has said.**

He told the New Nigerian at Serti, that the disease persisted because health inspectors who frequent the area take stock of the situation without any follow up.

Alhaji Hammangabdo said the area is also cut off not only in terms of good road link with other parts of the country, but also in the area of communication. The area, he said, does not receive the

services of the NTA, Yola and the Gongola Broadcasting Corporation (GBC).

He said the people hardly received programmes of the Federal Radio Corporation of Nigeria, Kaduna. The situation, the chief said, had remained unchanged for over 20 years.

The chief restated the importance of the road link to the Mambilla Plateau, urging the federal government to release funds for the construction of the Serti-Gashaka-Yakuba-Mayo-Selbe.

Alhaji Hammangabdo said Adagoro, Gungumu, Jauro-Jalo, Maidanu, Mayo-Selbe, Filinga and Chabal-Hendu are areas where agricultural and livestock breeding flourished but that the villages were inaccessible.

He said poor road link between

Serti and the other villages had also hampered the distribution of essential commodities to the grassroots level.

On health care, he said the nearest hospital is at Bali and with the help of a missionary organisation, the sick are transported from the hospital to Takum and Wukari. The hospital of the military formation at Serti also assisted the local population, he said, and appealed to the state government to supplement the efforts of the military hospital with personnel and drugs.

CSO: 5400/10

CHOLERA OUTBREAK NOTED IN KANO STATE

Kaduna SUNDAY NEW NIGERIAN in English 14 Oct 84 p 12

[Article by A. B. Tapidi]

[Text] OVER 2,000 people are now receiving treatment in Wudil Local Government Area of Kano State following an outbreak of cholera in the area.

The Head of Medical and Health Department in the area Alhaji Abdulkadir Danzomo has confirmed however, that, no death has been officially reported from the affected areas.

According to Alhaji Abdulkadir, a team of medical personnel had been despatched to Wudil and Sumaila Districts each to provide preventive and curative treatment to the people in the areas so as to bring the situation under control.

A statement from the Information Department said, the Sole Administrator of the Local Government Area, Alhaji Abdullahi Muhmad had commended the medical staff for the prompt action taken in bringing the outbreak to the attention of the authorities.

Alhaji Abdullahi urged the people in the area to report to the nearest clinic whenever they suspect the outbreak of any disease for treatment and prompt control.

According to him, the local government council was determined to provide medical services to the people at the grassroot level within its financial resources for the rapid socio-economic development of the area.

In a related development, the sole administrator has appealed to student-midwives sent to the area on practical attachment to make the best use of the period by dedicating themselves to duty and showing exemplary character.

He urged them to interact freely with the local people to enable them know the common problems of the people in the area adding that, the present administration was leaving no stone unturned in the provision of health facilities and services to the people.

CSO: 5400/9

NIGERIA

BRIEFS

MEASLES OUTBREAK--Minna, 15 November (NAN)--Sixty-one children died within the last 1 week in Gbako local government area of Niger following an outbreak of measles, the public health superintendent in the area, Malam Abdullahi Etsu, said yesterday in Minna. Malam Abdullahi told newsmen that the victims were children of between 9 months and 5 years. He said that the epidemic had been checked but appealed to the state government and individuals to provide the area with more vaccines to prevent future outbreaks. Malam Abdullahi also advised the people to report the outbreak of any epidemic to the health authorities. [Text] [Lagos NAN in English 1230 GMT 15 Nov 84 AB]

CSO: 5400/27

EPIDEMIC HEMORRHAGIC FEVER VIRUS STRAINS COMPARED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICRO-BIOLOGY AND IMMUNOLOGY] in Chinese No 4, Aug 84 pp 236-238, 219

[Article by Song Gan [1345 1626], Hang Changshou [2635 7022 1108], Liao Huaxin [1675 0553 2450], et al., all of the Institute of Virology, China National Center for Preventive Medicine, Beijing: "Antigenic Comparison of Virus Strains of the Wild-Mouse Type and the House-Rat Type of Epidemic Hemorrhagic Fever (EHF) in China"]

[Summary] Comparative studies of the antigenic relationship between virus strains of the wild-mouse type and the house-rat type of EHF were made using cross immunofluorescence, cross neutralization and cross blocking tests. The following results were obtained: antisera of the wild-mouse type EHF gave good neutralizing response to the house-rat type EHF virus, similar to that of its homologous virus, but antisera of the house-rat type EHF, although giving good neutralizing response to its homologous virus, gave no obvious response to the virus of the wild-mouse type EHF. Results of cross blocking tests also showed that antisera of the wild-mouse type EHF could block immunofluorescence of the monoclonal antibody (25-McAb) of A<sub>9</sub> of the wild-mouse type EHF in both slide antigens of the two types of EHF. In contrast, although antiserum of the house-rat type EHF gave good blocking response on the homologous slide antigen, the blocking titer was very low in the slide antigen of the wild-mouse type EHF. All the above-mentioned results indicate that obvious antigenic differences are present between virus strains of the two types of EHF. This is of great importance in identifying the serologic type of the virus strains and in studying for an EHF vaccine later on.

9717

CSO: 5400/4109

MOSQUITO LARVAE INSECTICIDE RESISTANCE STATUS REPORTED

Dalian HUANJING KEXUE XUEBAO [ACTA SCIENTIAE CIRCUMSTANTIAE] in Chinese No 3, Sep 84 pp 233-240

[Article by Liu Weide [0491 4850 1795] and Chen Wemmi [7115 2429 5019], both of the Collaborative Organization of Insecticide Resistance Monitor, China, and Shanghai Institute of Entomology, Chinese Academy of Sciences: "Status of Insecticide Resistance of Mosquito Larvae of Culex pipiens L. Complex (Culicidae, Diptera) of China, Particularly on Relationship Between  $LC_{50}$  and Discrimination Dose"]

[Summary] Both Culex pipiens Coq. and Culex fatigans belong to the complex Culex pipiens L. The former is distributed in northern and central China, while the latter is in southern China. Whether in the city or in the country, they are the prevailing species and play the role of transporting Wuchercheria bancrofti and Japanese B encephalitis. The polluted water bodies, such as ponds, ditches and other receivers, are the major breeding places of both species. Since the beginning of the 1950s, large quantities of organochloride insecticides have been used to treat the breeding places to control mosquitoes. Their resistance has increased rapidly. Since the 1960s, the organophosphorus (OPs), such as dipterex and DDVP, have been used as the substitute all over the country. However, since the early 1970s, it was found that the effectiveness of OPs has decreased more than in previous years. In 1978-1982, a general survey was made of the tolerance of both species to six kinds of insecticides in 32 counties of 16 provinces. As a reference for the hygiene and epidemic organizations, the results for 1982 were listed indicating  $LC_{50}$  and resistance levels (R, M, S). The principle used in the discrimination dose was from the WHO (WHO Technical Report 655, 1980). However, it was found that the tolerance of C. pipiens pallens and C. fatigans in China proved to be rather susceptible when compared with the discrimination doses suggested by WHO. Thus, there is a review of the discrimination dose of the 12 kinds of insecticides for Chinese susceptible strains and the discrimination dose suggested, as shown in this paper.

After the data shown in this paper were examined, the following was found:  
1) The resistance level (R, M or S) mainly corresponds to  $LC_{50}$ . In some districts, such as Dinghai and Beidaihe, however,  $LC_{50}$  against fenitrothion indicates that there is no significant difference; yet the resistance level

of the former belongs to R and that of the latter to S. This phenomenon shows that frequency of a highly resistant individual among the population of the former is higher than that of the latter. Therefore, the method tested with discrimination dose is considered to be suitable for predicting the potency of resistance. In fact,  $LC_{50}$  is still the best item used for indicating the resistance level.

2) Many authors have demonstrated that carboxylesterase is the degradation enzyme of both malathion and dipterex, while C. pipiens pallens and C. fatigans in China show high resistance to dipterex in many districts, but are still susceptible to malathion. Such a phenomenon indicates a favorable possibility of using malathion as a substitute for dipterex for a while.

3) As far as is known, malathion and fenitrothion are the only ones used to control agricultural pests in China. However, C. pipiens pallens and C. fatigans have developed resistance to both insecticides in most parts of eastern China as mentioned in this paper. There are two possibilities: first, due to cross resistance by dipterex resistance, and second, due to both insecticides having contaminated the breeding places of these mosquitoes while controlling agricultural pests. However good an insecticide may be when applied to the control of pests of any kind, contamination of the environment is unavoidable, thus causing interaction between various organisms which are not limited to the target pests.

9717

CSO: 5400/4108

## BRIEFS

INDIAN CHILDREN SUFFERING HEPATITIS--Three hundred families of the Indian community in Utucuro are in a grave situation, living without shelter and without food in the Ucayali department. Their homes and farm lands were wiped out by the flooding of the river of the same name last January. Community representatives, led by Utucuro's education coordinator, Juan Tamani Ricopa, appealed to this newspaper to ask for aid to be able to get out of their destitute condition. Tamani reported that this picture of desolation became even worse when between last 8 and 19 August, two strong storms with intense winds devastated the area, causing major damage to the already destroyed homes and farm areas. He stated that the children are the most affected, and that presently around 100 of them are victims of dehydration and hepatitis, among other diseases. [Excerpt] [Lima EL COMERCIO in Spanish 13 Oct 84 p A-7] 9730

CSO: 5400/2002

HEALTH MINISTRY REPORTS BATAAN TYPHOID UPSURGE

Manila BULLETIN TODAY in English 26 Oct 84 p8

[Text] Some 500 people in Bataan have come down with typhoid fever from January to September this year, according to a Ministry of Health (MOH) official.

Dr. Ricardo Trinidad, Bataan provincial, health officer, reported to the MOH health intelligence service that the number is double that registered in Bataan for the same nine-month period last year.

He informed his chief Julio Valera that as a consequence, a seminar about this acute intestinal disease will be held in his office in the capital town of Balanga.

Likewise, Valera and an epidemiologist are leaving for Bataan next week to verify the reported typhoid prevalence and to look into the cause and the extent of its incidence in the province.

In a related development, the chief reported a continued high incidence of the highly-communicable disease in Metro Manila and neighboring areas.

Valera said for the week ending Oct. 20, a total of 62 typhoid cases were admitted at the San Lazaro Hospital (SLH). The figure is considerably higher than the average weekly 11 typhoid admissions at the SLH for the past five years.

Of the 62 cases, 55 were from Metro Manila, Manila had 16 cases; Pasay City, 12; Paranaque, seven; Las Pinas and Quezon City, four cases each; Makati, three; San Juan and Caloocan City, two each; and Pasig, Navotas, Mandaluyong, Markikna, and Taguig, one case each.

CSO: 5400/4321

TYPHOID CASES INCREASE IN MANILA, OTHER AREAS

Manila BULLETIN TODAY in English 15 Oct 84 pp 1, 15

[Text] A significant upsurge of typhoid fever in Metro Manila, particularly in the areas of Manila, Pasay and Paranaque, was reported yesterday by health authorities who said they have yet to determine the source of infection.

Dr. Julio Valera, chief of the health intelligence service (HIS) of the Ministry of Health (MOH), said that typhoid fever cases have increased from 28 in the previous week to 61 cases last week.

The incidence was remarkably higher than the five-year median of 19 cases, he said.

Expressing concern over this occurrence, Valera said he would send a team of epidemiologists to the affected areas in Pasay and Paranaque to conduct an intensive search for carriers and sources of infection of typhoid, which can either be contaminated water or infected food.

Based on admissions at the San Lazaro hospital the HIS reported that 47 typhoid cases were Metro Manila residents coming from Manila, 15; Paranaque, 10; Pasay City, 6; Makati, 4; Valenzuela and Quezon City, 3 each; Navotas and Caloocan, two each; and Malabon and Las Pinas, one case each.

The rest came from the neighboring provinces such as Bulacan, 9; Cavite, two; and Rizal and Laguna, with one each.

Epidemiologists noted that the incidence of typhoid fever was significant in Paranaque.

Meanwhile, Bulletin correspondent C. C. Rosales also reported a number of typhoid cases and casualties in Don Carlos village and barrio Filipino of the National Housing Authority near the Baclaran area.

CSO: 5400/4315

PORTUGAL

PERSISTENCE OF TUBERCULOSIS IN ARMED FORCES, POPULATION

Lisbon A TARDE in Portuguese 11 Oct 84 p 20

[Excerpts] The status of the anti-tuberculosis campaign, particularly in the Armed Forces, was the topic of a symposium sponsored by the CEMGFA [Armed Forces Chief of Staff], General Lemos Ferreira. One of the organizers of the symposium disclosed that one out of every two young people who join the Armed Forces presents the symptoms of having been in contact with the tuberculosis bacillus, although he added that "it is better than in previous years."

In the opinion of Navy physician Jose Macanita, the main problem in combatting tuberculosis lies in detecting and controlling contagious persons. According to him, this will require massive popular support.

As for the current situation in the Armed Forces, he pointed out that it has improved, "The level of contagion is less than in previous years," during which positive tuberculine tests were reported in over 70 percent of the young men who joined the ranks of the three branches of the military.

The same opinion was voiced by lung specialist Leal Gonalves, who represented Portugal at the International Anti-Tuberculosis Union. "Controlling the carriers of the infection is the main problem," he said.

Situation Serious

"The situation is serious but not alarming," according to various clinics contacted by ANOP on the incidence of tuberculosis in Portugal.

About 440 persons die from tuberculosis in Portugal every year (4.4 deaths per 100,000 inhabitants in 1983), and 6,900 new cases of the disease are detected (69 new cases per 100,000 inhabitants in 1983).

The indices for the disease in Portugal do not differ from the European averages (on the order of four deaths per 100,000 inhabitants and about 40 new cases per 100,000 inhabitants in 1972).

But, as various physicians reported, a comparison of indices should not hide the reality: for over 30 years, there have been treatments which are 100 percent effective, and yet tuberculosis persists and even kills.

Data from the Anti-Tuberculosis Campaign Service (SLAT) reveal that the disease's downward trend in Portugal reversed itself in 1976.

At that time, there were new outbreaks of tuberculosis, which were presumed to stem from decolonization.

Between 1979 and 1981, the incidence of new cases among children up to 14 years of age declined, but continued to rise for the population as a whole.

From 1982 to 1983, the incidence dropped from 72 to 69 cases per 100,000 inhabitants.

The physicians think that, "once the reservoir of carriers was attacked, the incidence tended to go down once again."

With regard to the mortality rate (4.4 deaths out of 100,000 inhabitants), they said that it was difficult to control, since those generally involved were "marginal individuals, prostitutes, alcoholics and drug addicts."

"The systems are now geared to the large majority of the population, and not to specific social groups," they added.

#### Social Factors

"We have all inherited a large group of infectious agents," but tuberculosis only breaks out in those whose defenses are weak because of physical illness, poor diet, unsanitary living conditions, psychological violence, etc." the physicians reported.

Finally, it is social factors which explain why the incidence of new cases of tuberculosis in Lisbon and Setubal is 100 for 100,000 inhabitants per year, when for the population as a whole the rate is 69 per 100,000 inhabitants.

9805  
CSO: 5400/2501

PORTUGAL

BRIEFS

HIGH INCIDENCE OF INFECTIOUS DISEASES--Portugal has the highest incidence of infectious diseases in Europe, according to infectious disease specialist Rocha Marques. At a meeting entitled "Intection in the 80's" held in Porto, Rocha Marques said that "30 percent of the Portuguese population is afflicted by infectious diseases caused by bacteria, a virus or other agents." According to that specialist in charge of the meeting, "its purpose is to call attention to the high incidence of infectious diseases in Portugal and bring people, and especially general clinics, up to date on the latest information in the field." Some 20 participants analyzed subjects such as immunity and infection, viral hepatitis, viral infections, pneumonias, and bacterial infections. [Text] [Lisbon O DIA in Portuguese 12 Oct 84 p 1] 9805

CSO: 5400/2501

## BRIEFS

ANTI-DENGUE MEASURES--The Bureau for Public Health (BOG) took a number of steps to prevent that our country will be hit by a (new) dengue epidemic. It is important that the contaminating virus be kept out of our country. Agreement was reached with the airlines that every airplane from the region will be sprayed before it lands. After the planes have landed they will be inspected by an inspector of the Bureau, and, if necessary, they will be sprayed again. Every passenger receives then a card which invites him or her to go to the BOG or a personal physician if there are complaints which could point to dengue. Since recently this service is sending every evening two vehicles through Paramaribo and its surroundings to spray yards and houses. Of the total number of inspected dwellings 40 percent were found to be contaminated. A reduction to 5 percent is the goal of this operation. [Excerpts]  
[Paramaribo DE WARE TIJD in Dutch 13 Oct 84 p 1] 10319

DENIAL ON TYPHUS ISSUED--Although typhus patients are being admitted almost every day the BOG believes that the epidemic is not spreading. According to the BOG any additional patients have all been in contact with persons from Santigrón where the disease began. The BOG is now tracking down all the contacts, which is quite a job. There are a lot of children among the patients. In Santigrón, an isolated village on the Saramacca river, the BOG remains active with advice on hygiene to bring the contamination under control.  
[Text] [Paramaribo DE WARE TIJD 18 Oct 84 p 1] 10319

CSO: 5400/2007

DENGUE FEVER DISCOUNTED; OTHER DISEASE STATISTICS GIVEN

Port-of-Spain EXPRESS in English 18 Oct 84 p 3

[Text]

MINISTER of Health and Environment, Dr Neville Connell, and doctors at the Port of Spain General Hospital have quashed rumours about a dengue fever outbreak in Trinidad and Tobago.

Doctors confirmed that a virus which resulted in high fever was sweeping through the country and was being referred to as "the six per cent."

One doctor told the EXPRESS that the virus was on the decline. During its peak period, he said, the hospital treated some 10 patients on a daily basis. A few patients, particularly children, were warded, he said. No lives have been claimed by the virus, the doctor said.

The doctor expressed doubt that the virus could be dengue fever.

"The symptoms are different and the patients are recovering too quickly for it to be dengue fever," the doctor said. He added that the high fever usually subsided after a day or two, whereas there might be a lingering temperature with dengue fever.

Connell said that the symptoms of the "six per cent" virus were not similar to that of dengue fever. Viral investigations

are now being conducted.

So far this year there were 21,665 cases of influenza as compared with 17,234 during the same period last year. According to a report from the ministry, Caroni had the greatest number of cases with 6,050 while St George had 2,871 cases. St Patrick recorded 2,141 cases, County Victoria recorded 1,461 cases as compared with 25 during the same period last year.

Gastro-enteritis showed an increase as well with 15,341 cases reported as against 11,488 cases during the same period last year. County Caroni again led the country with 4,030 cases. St George East recorded 2,234 cases. Tobago showed a decrease in both gastro and influenza. There were 92 cases of influenza as compared with 179 cases last year and 47 cases of gastro-enteritis as compared with 142 last year.

There was also an increase in the number of cases of measles. The country recorded 3,341 cases as compared with 1,886 during the same period last year. Caroni led with 992 cases as compared with 401 cases last year. St George East had 914 cases, Tobago recorded only 34 cases.

CSO: 5440/011

## VENEZUELA

### BRIEFS

CONJUNCTIVITIS OUTBREAK--Around 7,000 cases of hemorrhagic conjunctivitis have been recorded in Venezuela thus far this year, which has caused health authorities to consider declaring an epidemic. Of the 7,918 cases cited so far, and based on statistics of the Division of Communicable Diseases [DET], the regions most seriously affected by the number of victims are the Federal District (2,472 cases), Lara (1,360), Zulia (783), and Bolivar (531). Rafael Travieso, chief of the DET under the minister of health and social assistance, believes that even more victims may exist, since cases are underreported, especially those of patients in private clinics. For this reason, he is sending urgent telegrams to the subregional epidemiologists in every state requiring them to report every case of conjunctivitis in order to put together an accurate picture of the problem. Travieso referred to the fact that the number of cases found as of September was very high compared to last year. The figures show the number of victims to be almost equal to the 1982 total of 11,000, when the last conjunctivitis epidemic was recorded. Conjunctivitis is a benign viral illness which begins with a sudden onset of pain and the sensation of a foreign object in the eye. The disease advances rapidly in 1 or 2 days, until it culminates in the clinical syndrome of swollen eyelids and vascular congestion of the conjunctiva, frequently including seromucous discharges and subconjunctival hemorrhaging. [Text] [Caracas EL DIARIO DE CARACAS in Spanish 4 Oct 84 p 7] 9839

HEPATITIS REACHES EPIDEMIC PROPORTIONS--In the first 9 months of the year, 4,647 cases of hepatitis, 48 of them fatal, were reported in this country. This has led health authorities to declare that hepatitis now constitutes an epidemic of considerable proportions. Rafael Travieso, chief of the DET [Division of Communicable Diseases] under the Ministry of Health, reports that due to this situation, a national commission will be responsible for collecting national and international data on the etiology (causes) and epidemiology of the disease. It will also study programs and measures for prevention treatment, and rehabilitation. Hepatitis has undergone a notable increase here over the last 2 years. In 1982, 4,038 cases were recorded, with 50 fatalities; in 1983, 6,059 cases and 40 deaths were reported. It is estimated that this year will end with a total of more than 6,000 cases and a greater number of deaths than before. This increase in the number of cases is due, according to Travieso, to the fact that physicians can now diagnose the disease with greater accuracy. [Text] [Caracas EL DIARIO DE CARACAS in Spanish 6 Oct 84 p 4] 9839

CSO: 5400/2004

VIETNAM

BRIEFS

HA TUYEN MALARIA CONTROL--The Ha Tuyen provincial health sector has adopted many effective measures to prevent and counter malaria. Since early this year, mobile antimalaria units have traveled to every village and hamlet to give malaria control instructions to the people. They have also sprayed over 33,000 kg of DDT and provided medical treatment for 154 malaria victims in 57 villages. [Summary] [Hanoi Domestic Service in Vietnamese 1300 GMT 2 Nov 84 BK]

CSO: 5400/4318

## BRIEFS

SALMONELLA AFFECTING CATTLE EXPORTS--The salmonella epidemic in Finland is causing restrictions in the export of cattle to the Soviet Union. Because of the epidemic in southern Ostrobothnia, only 130 head of cattle were exported, instead of the 330 planned. The animals are to be destroyed on Tuesday [23 October]. Salmonella has been found in the coastal area of southern Ostrobothnia, in the regions of Kauhava and Lappo. The area has been declared in quarantine, and this may continue until spring. It is still unknown whether the illness was spread by cattle or via fur farms. Agronomist Osmo Sorismo of the Livestock Institute said that it is difficult to live with a quarantine, but still necessary. Sorismo further stated that Finland cannot jeopardize its good reputation because of an epidemic. [Text] [Helsinki HUFVUDSTADSBLADET in Swedish 23 Oct 84 p 15]

CSO: 5400/2502

VACCINATION CAMPAIGN FOR CATTLE REPORTED

Conakry HOROYA in French No 58, 28 Aug 84 p 3

/Article by Mamadou Sy Savane: "Cattle Vaccination Campaign"/

/Text/ The cattle plague campaign is a chief preoccupation of the government of the Second Republic, faced with endless threats which have hindered the improvement and increase in number of livestock. Effective and timely action needs to be taken to aid our breeders who have suffered in the recent past.

In response to this need, missions from the Ministry of Livestock and Fishing, assisted by prefectural authorities, have provided a series of livestock vaccinations and treatments in the Koundara-Gaoual-Boke belt these last few weeks. The effort seems well worth it when one witnesses the enthusiasm of peasants and cattleherders coming to meet the vaccination teams to treat their animals. They overflow with praise for the CMRN /Military Committee for National Recovery/. "We are no longer afraid of approaching the authorities. Our animals really belong to us," they say, fully expressing their joy and satisfaction.

After the Gaoual and Koundara zones, the Ministry of Livestock and Fishing's mission, led by the national coordinator Mr Ousmane Diallo, is stopping in the Boke prefecture with Mr Kanfory Camara, prefectural director of Livestock, and the division chiefs. This mission has been touring since 10 August 1984 in the subprefectures of Kollaboui, Bintimodia, Sangaredi and Tanene. Besides the vaccination and treatment of livestock, it organizes information and hygienic education conferences for peasants and breeders to promote better care of cattle.

9825

CSO: 5400/20

## RINDERPEST MEASURES URGED, WARNING ISSUED ON 'QUACKS'

Kaduna NEW NIGERIAN in English 27 Aug 84 p 1

[Editorial: "Rinderpest: Final Assault"]

[Text]

DR. Kelsey David-West, director of the Federal Livestock Department told the last meeting of the National Rinderpest Eradication Committee that the resurgence of the cattle disease in some African countries was due largely to failure of governments to implement measures recommended by the 1962-66 international campaign against the disease.

The cost to us of that negligence was over 40,000 heads of cattle last year alone and a great deal more in the misery and deprivation suffered by a large population of farmers and dealers. Now that the scourge seems to abate, the nation has a chance to mount the final assault. We are delighted to note that the FMG has shown a willingness to provide the necessary impetus for a sustained battle. The three million Naira vote for this year's eradication campaign may be modest but it will go a long way especially as one-third of the amount is to be used by the National Veterinary Research Institute to produce the vaccines locally.

As was clearly established by the national eradication committee, those involved in the campaign at grassroot levels did not do the job as expected. This is very unfortunate given the large concentration of cattle in the rural areas. It needs no emphasis that most of the action is required where the cattle are. It is imperative for this year's campaign to take

cognisance of this fact and direct its efforts at the rural grazing areas of the pastoralists. The police and traditional rulers being co-opted into local campaign committees should be strengthened by careful composition of the committees to ensure meaningful participation in the areas.

An eagle eye should be kept chiefly on the corrupt inoculators, quacks and other veterinary personators whose interests do not seem to square with that of the nation. They exploit the innocence of the herdsmen to demand bribes and sell vaccines meant to be given free and thereby pose a big threat to the success of the campaign. In addition, the government should study the recommendations of the national eradication committee which were arrived at during its last meeting in Kaduna and ensure speedy implementation of those feasible.

Meanwhile, the time has come for us to consider more radical methods of boosting meat production in the country if only to make up for the 1983 losses. The National Animal Production Research Institute has recently introduced artificial insemination unit to develop hybrids that will have meat and milk production as their peculiarities. Initial resistance to it which was founded on farmer ignorance seems to have disappeared and the institute should be given material support in this worthwhile venture.

VACCINES FIRM PLANNED IN PLATEAU STATE

Kaduna NEW NIGERIAN in English 3 Sep 84 p 1

[Article by Aliyu Biu]

[Text] A 53 million Naira company to produce 15 types of vaccines would be set up at Vom, near Jos in Plateau State, Director of the National Veterinary Research Institute, (NVRI), Dr. A. G. Lamorde, has said.

The director said all arrangements had been completed and that the institute was only awaiting approval by the Federal Government.

He told the New Nigerian at Vom that the company would produce 600 million doses of vaccines annually to treat all kinds of animal diseases.

The proposed company, he said, would produce 20 million doses of rinderpest vaccines "which is more than the total number of cattle we have in the country" while 60 per cent of the production would be for poultry diseases.

On the efforts to fight rinderpest in the country, Dr. Lamorde said that last year, the institute produced 117 million doses of vaccines out of which 9.7 million was for rinderpest.

"But we went out of production in January-March this year, because all our chemicals went bad as a result of constant power failures. The chemicals needed to produce vaccines are very delicate and must be kept under a certain level of temperature."

The Federal Military Government, he said, came to their rescue with the provision of about 90,667 Naira which they used in importing two tonnes of chemicals for the production of vaccines.

From April to date, the director said, the institute had so far produced 6.3 million doses of rinderpest vaccines, which if properly used, could cover one-third of the total cattle population in the country.

He said that the Food and Agricultural Organisation (FAO) had given them some equipment worth 250,000 U.S. dollars (about 191,984 Naira) among them an Ultra Freezer of minus 70 degrees centigrade which could store the viruses used in producing vaccines for several years.

## BRIEFS

UNIDENTIFIED DISEASE THREATENS CATTLE--A rare disease of still undetermined origin is decimating the cattle herds in Alto Mayo, and it is feared that they will be totally destroyed after the effort and substantial investment that has been made to raise them. The residents of Rioja, Moyobamba, Tarapoto, Juanjui, etc., are anxious about the possibility that sick animals are being slaughtered in the slaughterhouses and the meat sent to the local markets. The alarming aspect of the problem is that despite the fact that this disease appeared 4 months ago, no one is at all concerned with investigating its cause, much less with combatting it. On the other hand, the cattle breeders, who lack an understanding of animal hygiene, throw the dead animals into the river banks, thereby spreading the illness. The most affected areas are Yuraciaquillo, Sapote, Yantalo and Gobernador. The cattle breeders from the region are requesting the direct intervention of the Ministry of Agriculture, since the branch offices established here are not even aware of the problem. [Text]  
[Lima EL COMERCIO in Spanish 14 Oct 84 p A-15] 9730

5400/2002

BRIEFS

BOVINE TB CASES--The Ministry of Agriculture has slaughtered 10 cows in the last 10 days which were infected with tuberculosis. The cows, which were being reared for dairy produce at a farm in Wallerfield, were slaughtered when a tuberculosis programme was intensified following detection of the disease in animals at Hope Farm, Tobago, in June. According to Director, Veterinary Services at the Ministry of Agriculture, Lands and Food Production, Dr Vincent Moe, some 1,700 cows were tested for tuberculosis. Some 13 reactors of the disease were detected and isolated. Ten of those animals were slaughtered and lesions were found in six of the cows, following post mortems. Moe dismissed rumours that the cows destroyed recently belonged to the batch which was slaughtered in Tobago last June. [Text] [Port-of-Spain EXPRESS in English 24 Oct 84 p 1]

CSO: 5440/015

SMUT DISEASE POSES THREAT TO NEXT YEAR'S SUGAR CROP

Bridgetown BARBADOS ADVOCATE in English 9 Oct 84 p 1

[Text] While the run up to next year's sugar crop appears bright from the point of view of increased acreage under production and a possible early start there seems to be one pressing problem with which the industry must come to grips.

This problem relates to Smut Disease which a team of sugar officials said remained uncontrollable in some parts of the island.

They said it was hoped that everyone in the industry would by now be aware of the damaging effects of harbouring varieties of canes susceptible to Smut Disease, on their property.

"Regrettably, for whatever reason, this is not the case and there are still areas of varying sizes of badly infected cane which are causing grave concern to their neighbours," the officers said in a recent publication, which outlined the performance of the industry in 1984.

Smut Disease is the latest of a string of problems affecting the industry which, performed reasonably satisfactory this year. Production this year topped the 100 000 tonne mark, and there have been less canefires reducing the possibility of minimal losses

next year.

However, the financial problems of some estates are still there and Government has hinted again of giving further financial support to the industry, while there has been a reduced quota which will be sold on the U.S. market. But there will be no increase in price for shipments to Europe under the Lome Convention.

Sugar plants are now being prepared for the crop next year.

The publication relates to the yield of sugar cane in the island this year and was prepared by Mr. M. Clarke, Chief Tehnical Officer and Mr. N.E. Reece, of the Barbados Sugar Cane Variety Testing Station; and Mr. H.L. Elcock, Senior Agricultural Assistant of the Ministry of Agriculture.

The bulletin which is published annually gives a review of the last crop and from this year's it is clearly assumed that next year's crop could be better than the last one, if there are no major developments to hinder such a prospect.

The crop traditionally begins in January and with no wages negotiations ahead, an early start could be in the offing.

CSO: 5440/010

## DROP IN SPRUCE BUDWORM DAMAGE REPORTED IN NOVA SCOTIA

Toronto THE GLOBE AND MAIL in English 10 Oct 84 p B2

[Text]

HALIFAX — Spruce budworm damage to Nova Scotia's forests appears to have decreased by three-quarters this year, provincial Lands and Forests Minister Kenneth Streach says.

The department believes total defoliation caused by the pest dropped to about 86,000 hectares from about 350,000 in 1983. Howev-

er, Mr. Streach cautioned, the figures may be incomplete because aerial surveys were delayed by bad weather during the prime surveying season.

Nova Scotia uses a biological spray that is more expensive than chemical sprays but less controversial in the debate over the effects of pest control on human health and the environment.

Defoliation appears

to have dropped significantly in Cumberland County, where almost all the spraying took place, but also in Colchester, Annapolis and Hants counties, where there was little or no spraying.

The only increase noted was along the shores of the Northumberland Strait and on parts of the Cobequid Mountains from the New Brunswick border to Cape George.

The minister, who announced the results at a news conference yesterday, said spring weather was initially bad for the budworm's survival and development, although conditions improved for the pest in June. Also, there appeared to be little movement of budworm moths into or around the province.

The Nova Scotia Government sprayed about 21,000 hectares this year, using the bacterial spray *Bacillus thuringiensis*, or B-t. In New Brunswick, where defoliation surveys have not been completed, nearly a million hectares were sprayed with chemical pesticides and B-t.

CSO: 5420/8

## KERALA LOSES INCOME DUE TO COCONUT DISEASE

New Delhi PATRIOT in English 26 Oct 84 p 5

[Text]

**Trivandrum, Oct 25 (PTI)**—Kerala incurs a production loss of about Rs 300 crore annually as a result of the root wilt disease afflicting coconut palms, which has reduced the annual nut yield by 90 crore.

This was revealed in a recent survey conducted under the joint auspices of the Central Plantation Crops Research Institute (CPCRI), Kasargod, the State Department of Agriculture and certain other institutions.

Agriculture Minister A L Jacob, and director of CPCRI Dr M Bavappa told a press conference here yesterday that an earlier survey in 1976 on the extent of production loss due to root wilt disease had indicated an annual loss of about 34 crore nuts.

The survey, undertaken in eight southern districts of the State comprising 21 agricultural sub divisions showed the percentage of disease incidence was 32.36.

Dr Bavappa said with the discovery of the association of mycoplasma-like organisms with the diseased palms and the success obtained in the eradication of the disease in the sporadic areas of incidence through large-scale removal of affected trees had opened a new chapter in the management of the disease and its control.

The breakthrough achieved by the CPCRI in vegetative propagation of coconut through leaf tissue culture would be handy for the large scale multiplication of even a single root wilt disease resistant tree for massive replanting programme, he said.

The State Government had made available 60 hectares of land at Kayamkulam to the CPCRI for field research in raising disease resistant palms.

CSO: 5450/0027

## COFFEE RUST IN SOUTHEAST

Mexico City EXCELSIOR in Spanish 5 Oct 84 p 7-D

/Text/ Yesterday, Salvador Olmos of the Mexican Coffee Institute /INMECAFE/ said that coffee rust from Central America is moving into the states of Oaxaca and Tabasco. At the same time the disease has been brought under control on 80,000 hectares on which coffee is produced in Veracruz. On the other hand, Jose A. Chapa, CANACO /Mexico City Chamber of Commerce/ director in Nuevo Leon, said that the demand for coffee will drop considerably if the authorities authorize a price increase of 50 percent.

The INMECAFE official, in an interview with correspondent Jose Luis Hernandez Sosa, said that in 10 municipalities of the Tuxtla region the disease has also been brought under control, putting a stop to its progress in that area.

He said that large areas of Oaxaca and Tabasco have been "quarantined" since the coffee plantations are contaminated with the disease. However, he said that up to now there have not been large losses in the coffee plantations.

He admitted that the disease has advanced without difficulty due to the lack of agriculture sanitary inspection at the border. He said that Guatemala is another country suffering from coffee rust.

Angel Heredia Espionsa, INMECAFE agent in Oaxaca, said that the state's coffee production will drop by 12 percent due to the damage cause by the coffee rust. He said that the 1984 coffee production had been expected to be 600,000 quintals.

He said that the disease threatens to contaminate about 100,000 hectares of coffee lands and requested the peasants and producers to collaborate in the battle against the disease. He said that in 1983, a little over 40,000 hectares of coffee were fumigated. The above was reported by Felipe Sanchez.

Jose A. Chapa, CANACO director in Nuevo Leon, told Joaquin Paredes, the correspondent in Monterray, that the worker's income will drop if the authorities authorize a 50 percent coffee price increase since this will cause a drop in coffee sales.

Chapa said that the increase in coffee prices will benefit only the coffee planters. He stressed that price controls are against the interests of the people.

PEST CROPS DESTROY FOOD CROPS IN KANO, BAUCHI

Kaduna NEW NIGERIAN in English 12 Oct 84 p 1

[Text] OUTBREAK of various agricultural pests have been reported in Kano and Bauchi states.

The pests which destroy groundnuts, cowpeas, sorghum, millet and other crops were identified as aphids, stem-borers, grasshoppers, and quelea birds.

In Kano State, the pests destroyed in their trial groundnuts, cowpeas, sorghum, millet and rice in almost all the local government areas.

The Programmes Manager of the Kano State Agricultural and Rural Development Authority (KNARDA), Mr. A. H. Whytock, told the New Nigerian in Kano that there were minor and major outbreaks and the dry spell had enhanced the aphids population build-up.

Mr. Whytock explained that in many areas, it was necessary to use insecticide against the aphids, particularly where a long period of dry spell occurred while in other areas where they had heavy showers of rain, the aphids were washed away by the rains.

On the menace of quelea birds, he said that "KNARDA has purchased atomising machines and the appropriate chemicals for controlling the birds" Mr. Whytock said there was also a variety of insects attacking cowpeas and these were being controlled by farmers with assistance from the agricultural extension staff in the field. According to him, the farmers acquired the chemicals and sprayers from Kano State Supply Company stores and sprayed their cowpea crops as a routine.

In Bauchi, the General Manager of the Bauchi State Agricultural Development Programme (B.S.A.D.P.), Alhaji Adamu Husseini, warned of the dangers ahead if the rapid spread of quelea birds into the hinterland was not checked.

The birds, which move in flocks of millions and feed on grains are usually confined only to a small area around the Lake Chad, he said, but were fast multiplying and moving into the hinterland.

This year, the birds crossed the Borno State borders and invaded many millet farms in Gombe and Katagum areas of Bauchi State and Hadejia in Kano State.

At an interview with the New Nigerian in Bauchi on Wednesday, the B.S.A.D.P. general manager said "the birds are still around multiplying and spreading" adding that they have eaten a lot of millet and are now roosting and hovering about for a big assault on sorghum farms.

Alhaji Adamu called on the federal and state governments concerned to take drastic measures to check the birds and eliminate them completely. He said it was a pity that both the Federal Pest Control Unit and the Quelea Birds Control Unit were not operational to deal with the situation.

The general manager said when the birds invaded some parts of Bauchi State this year, BSADP acted promptly by spraying them with chemicals from an aircraft but it soon ran short of chemicals.

Alhaji Adamu said the BSADP had now secured 5,000 litres of the chemicals from West Germany but could not continue with the operation because the aircraft had been grounded due to lack of aviation fuel, engine oil and air worthiness certificate.

The general manager pointed out that our effort towards self-sufficiency in food production could not be a success if such problems like pest and quelea birds were not dealt with adding that the earlier drastic measures were taken, the chaper for the government and the better for the farmers and the country.

Alhaji Adamu then advised farmers to properly dry their grains before storing them and to use insecticides to protect them. He said an average of between 15 to 20 per cent of annual harvest was being lost through poor storage.

CSO: 5400/9

## BRIEFS

INCREASED PLANT PESTS--LARGE quantities of farm crops, including guinea corn, millet, and maize have been destroyed by birds in Fika Local Government area of Borno State, the Sole Administrator of the local government, Alhaji Mustapha Mallambe, said last Thursday. He said the large-scale destruction by the birds may lead to a disastrous harvest this year. Alhaji Mustapha said although the Federal Pest Control Unit carried out aerial spraying of pesticide in the affected areas, the birds appeared to have increased in number. He appealed to the state government to come to the aid of the people. [Text] [Kaduna NEW NIGERIAN in English 15 Oct 84 p 20]

CSO: 5400/9

VIETNAM

RESULTS OF CONTROL OF DITYLENCHUS ANGUSTUS ON MEKONG DELTA RICE

Hanoi KHOA HOC VA KY THUAT NONG NGHIEP Aug 84 p 351

[English Summary]

[Text] Ditylenchus Angustus has been spreading in the Mekong Delta, mainly in the water-logged districts along the Tien and the Hau Rivers, thus forming a conspicuous affected area. The disease has broken out and done damage to the Autumn rice throughout the period from the early-elongation stage till harvest and in the areas that have been heavily affected with the disease in the previous year. The high peak of affection has been found to be the period between panicle-blossoming and flowering stage (mid to late October).

Great attention has been paid to the control of the disease in many of the Mekong Delta provinces, which have applied fairly high dosages of basudin and furazan to get rid of it. Other measures have also been taken to limit its affection such as eliminating its source right on the fields, encircling and checking its spread to other areas...

CSO: 5400/4320

END