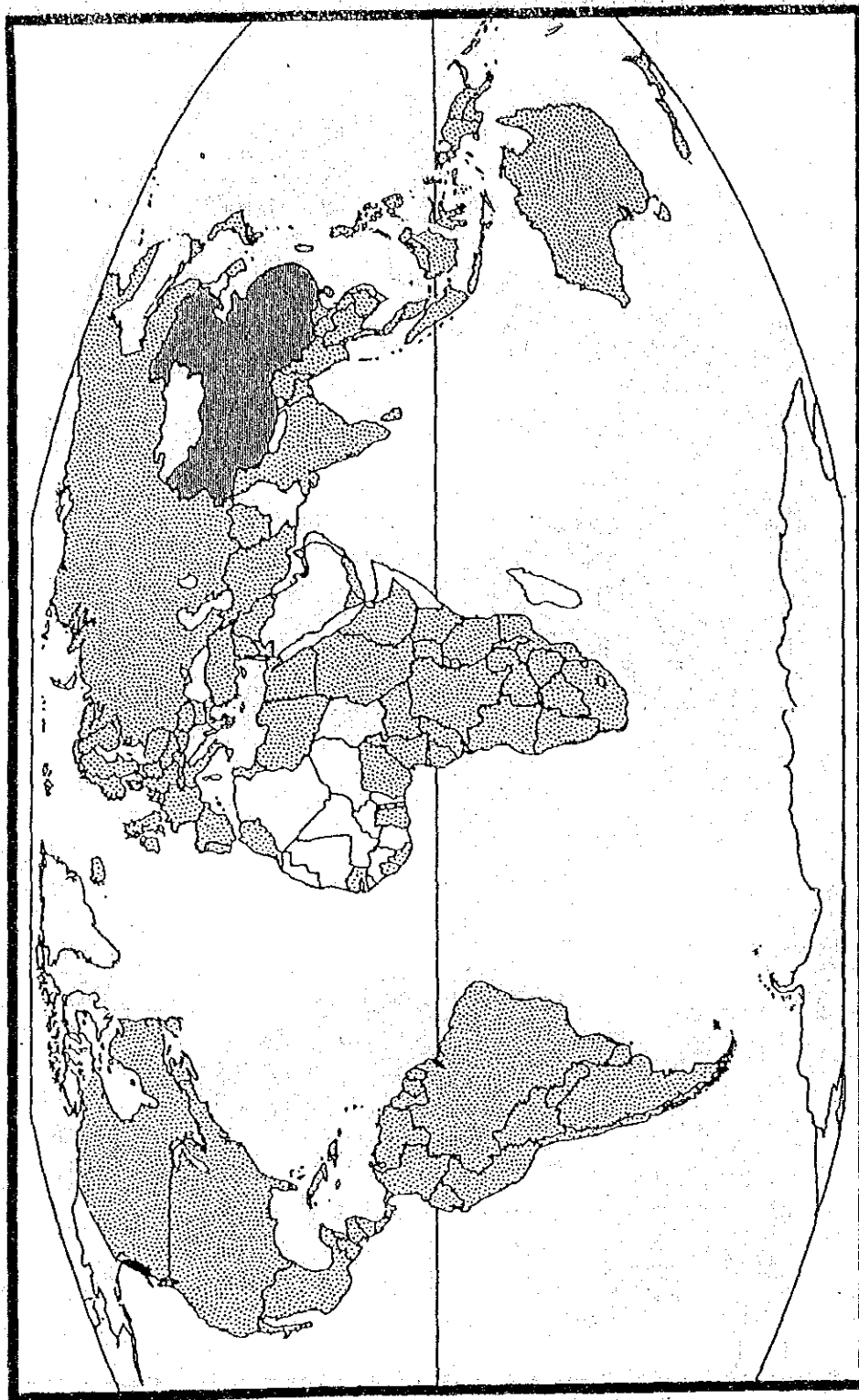
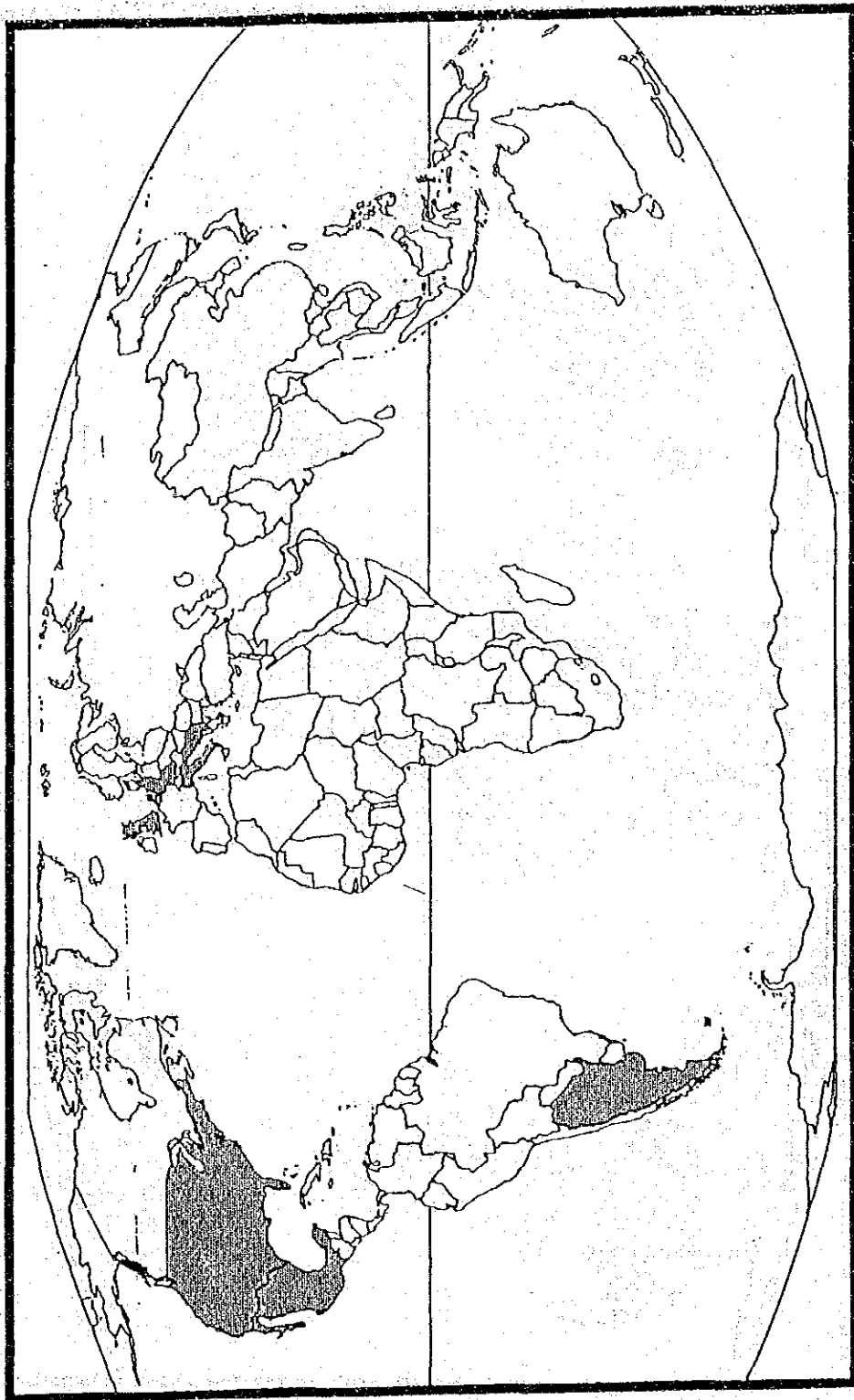


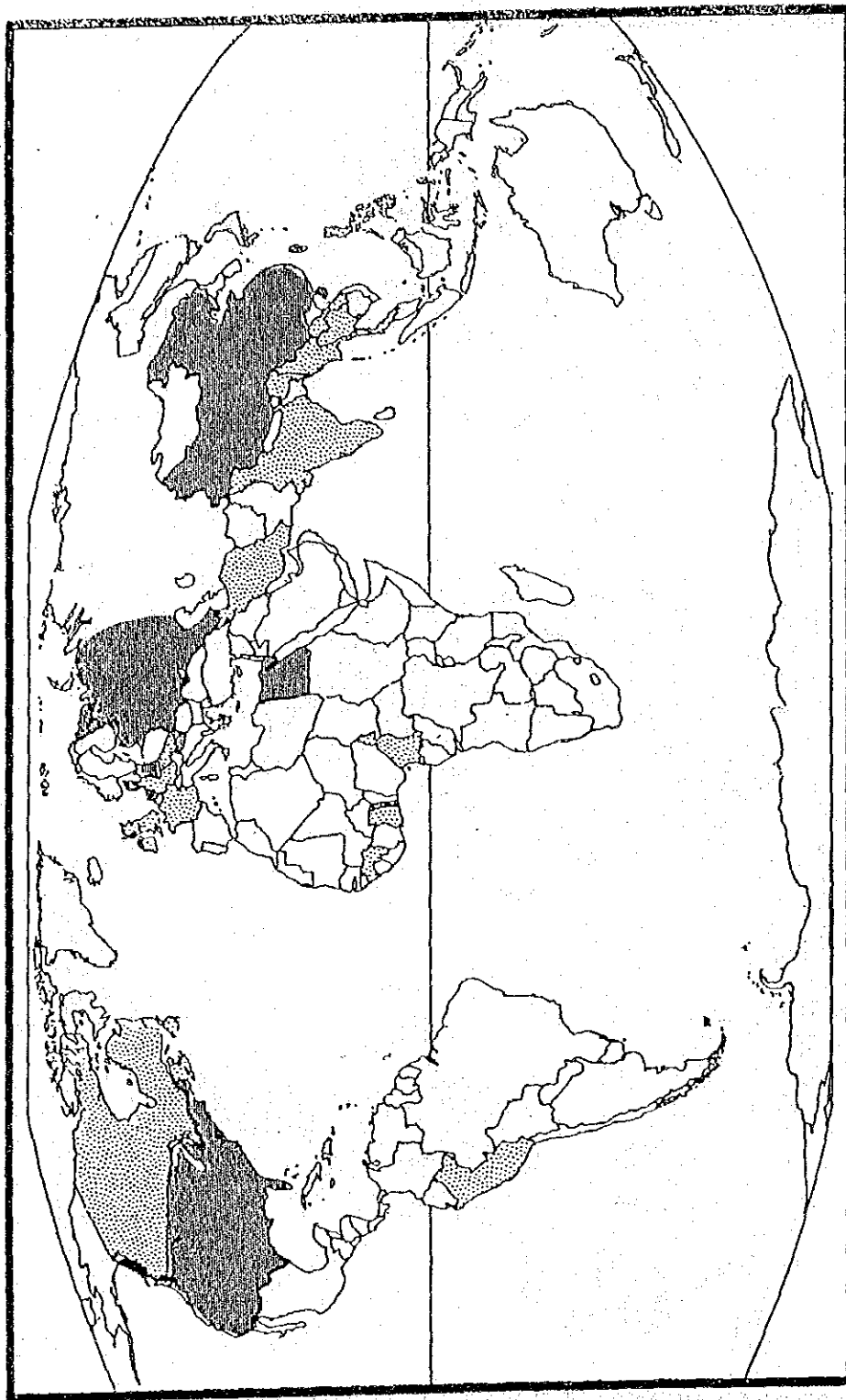
Avian influenza viruses. Shaded areas = Documented.



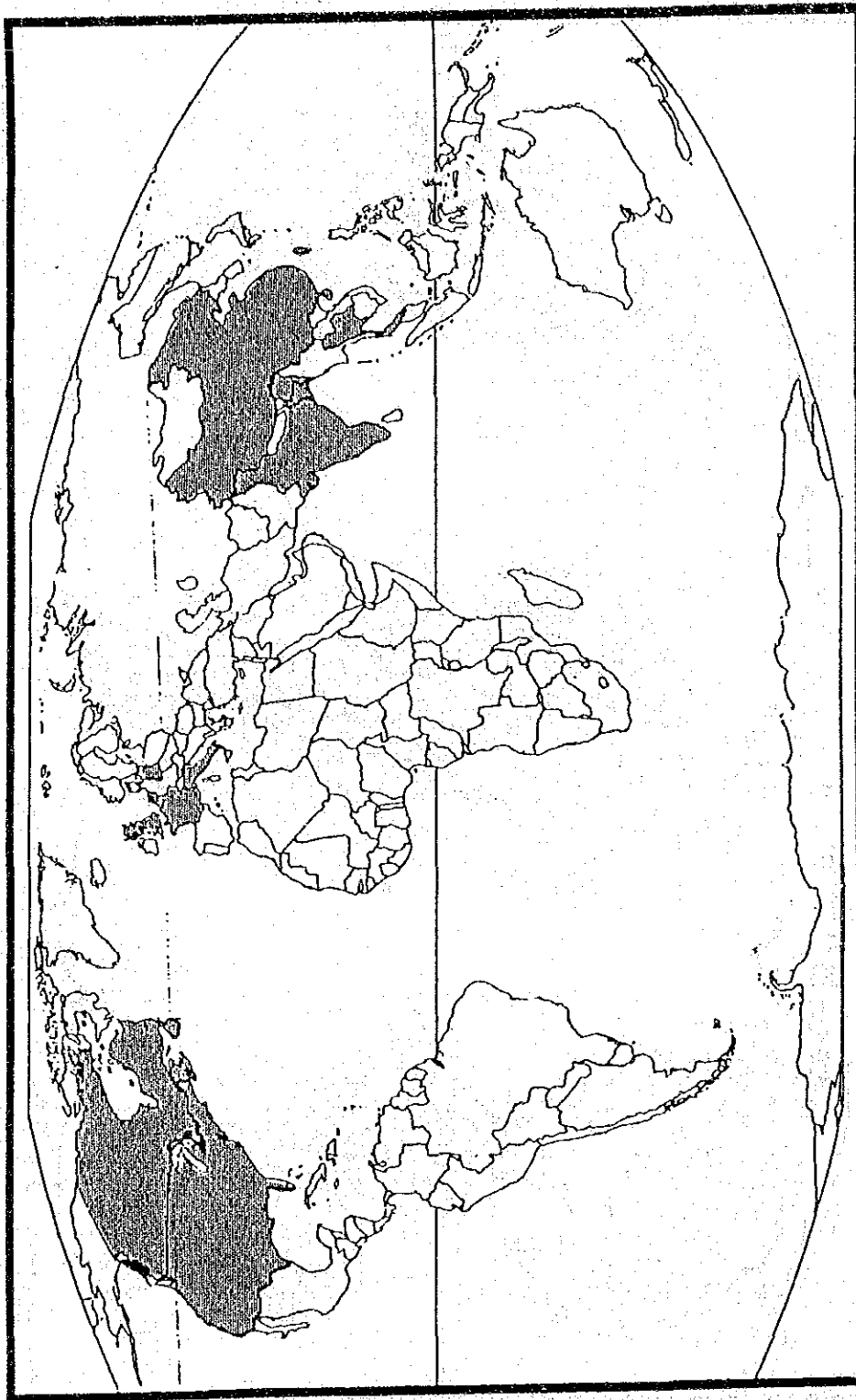
Avian leukosis virus. Shaded areas = Documented. Stippled areas = Either 1979 or 1980 AHY.



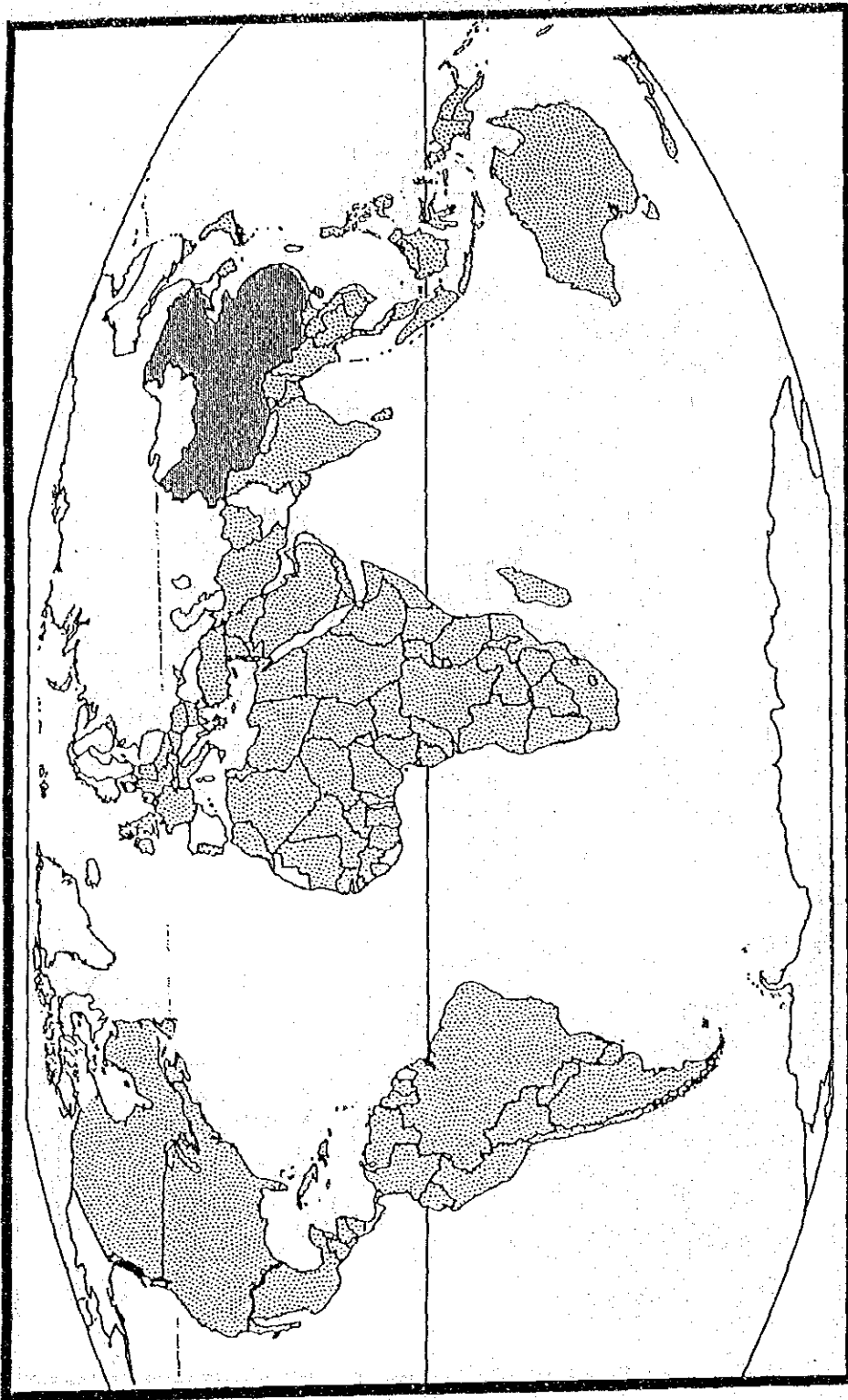
Avian viral arthritis virus. Shaded areas = Documented.



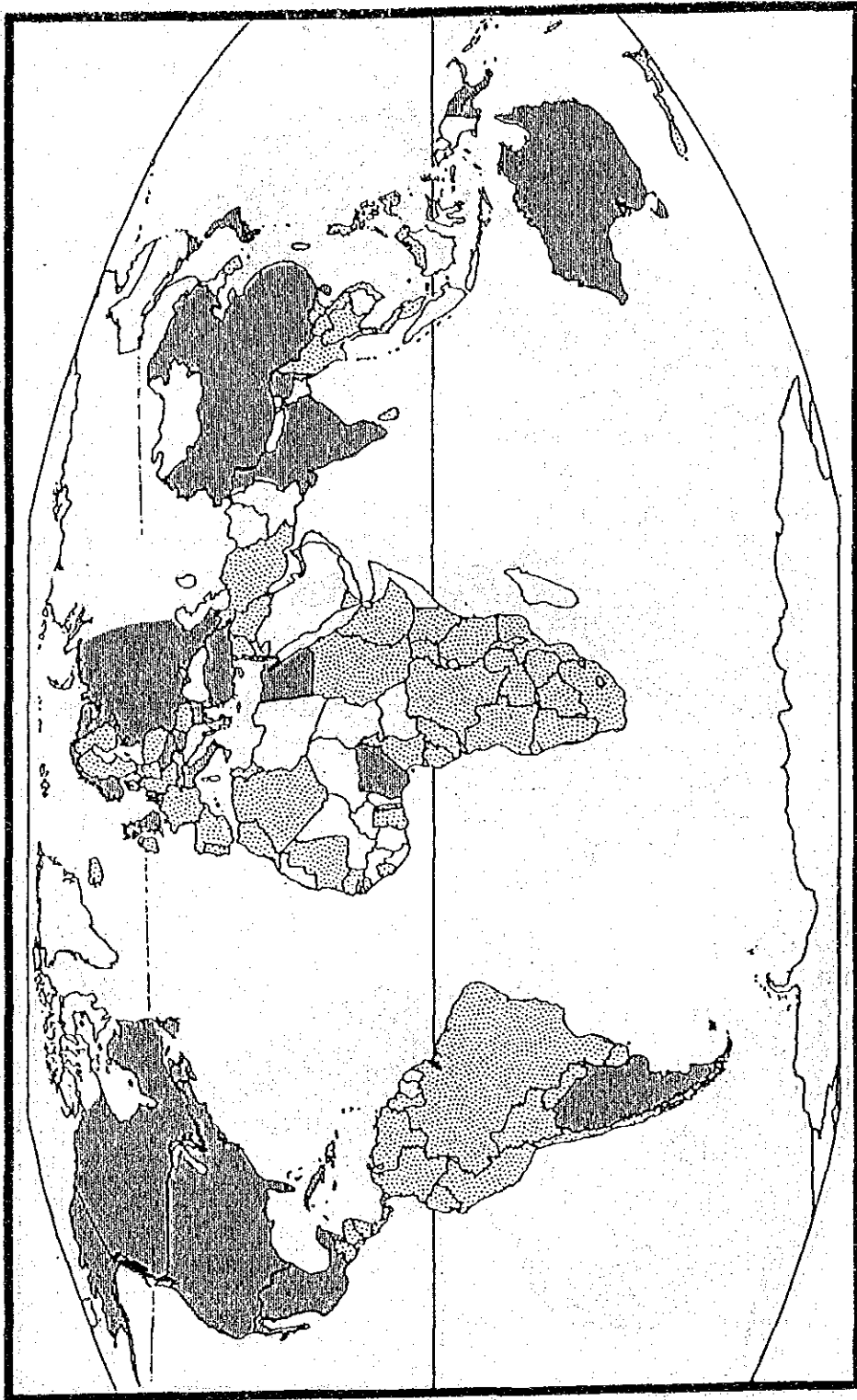
Duck hepatitis virus. Shaded areas = Documented. Stippled areas = Either 1979 or 1980 AHY.



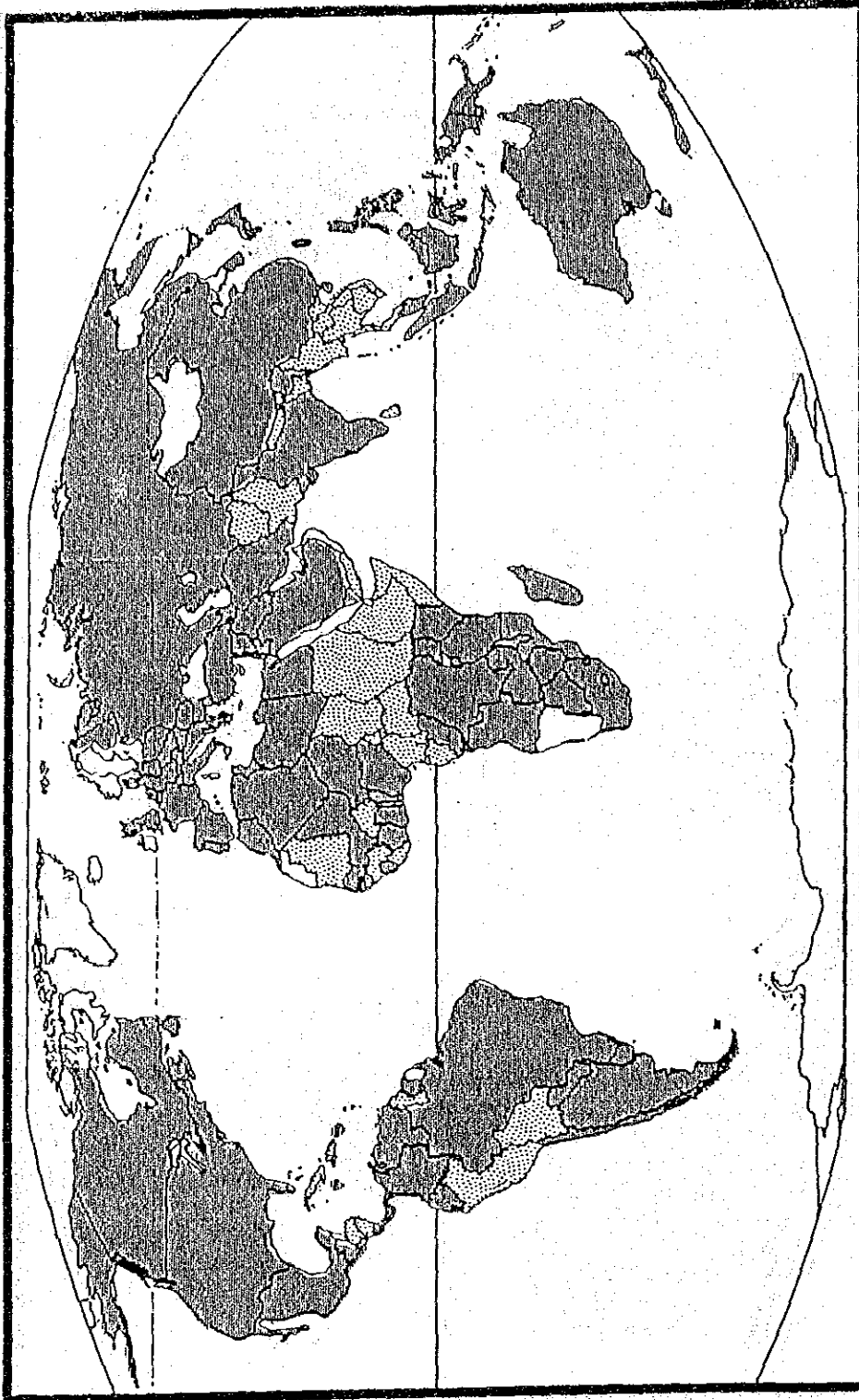
Duck plague virus. Shaded areas = Documented.



Fowlpox virus. Shaded area = Documented. Stippled areas = Either 1979 or 1980 AHY.



Marek's disease virus. Shaded areas = Documented. Stippled areas = Either 1979 or 1980 AHY.



Newcastle disease virus. Shaded areas = Documented. Stippled areas = Either 1979 or 1980 AHY.

寄 生 虫 病

寄 生 虫 名	学 名	発 育 型	終 宿 主	寄 生 部 位
大 鈎 頭 虫	Macracanthorhynchus	含仔虫卵 — (糞食性甲虫) — 終宿主	豚 猪 狼 人	腸
	hirundinaceus	中間宿主甲殻類水棲昆虫魚類	ネズミ(アカハタ)	小腸
環 状 鈎 頭 虫		— (チャバネゴキブリ) — 終宿主	(アカハタ)ネズミ	小腸
腎 虫	Diocotylome renal	卵細胞+卵黄細胞 — (魚類) — 終宿主	イタチ犬牛馬豚	腎 腹胸腔
有 棘 類 口 虫	Gnathostoma	卵 — 第1期幼虫 — (ケンミジンコ) 鮫皮(魚類) — 終宿主	犬 猫	胃 肝臓
	spinigerum	魚類両棲類鳥類	人	皮膚
ド ロ レ ス 類 口 虫	Gnathostoma	卵 — 第1期幼虫 — (ケンミジンコ) — (サンショウウオ) — 終宿主	豚 イノシシ	胃
	doloresi		イタチ	胃
日 本 類 口 虫	G. nipponicum			
東 洋 眼 虫	Thelazia callipaeda	含仔虫卵	大 兔 牛 人	結膜囊
マ ン ソ ン 眼 虫	Oxyspirra mansani	卵 — (オガワラゴキブリ) — 終宿主	雞 七面鳥孔雀	眼窩 鼻腔
糠 胃 虫	Acuaria humulosa	含仔虫卵 — (昆虫類とケンシスイガムシ) — 終宿主	雞 七面鳥	筋胃
血 色 食 道 虫	Spirocerca lupi	含仔虫卵 — (コガネムシ) — (両棲爬虫・鳥類) — 終宿主	犬 狐	食道壁 胃壁
美 麗 食 道 虫	Gongylonema pulchrum	卵 — (コガネムシ) — 終宿主	牛 羊 山羊 豚 人	食道壁
類 円 豚 胃 虫	Arduenna strongylina	含仔虫卵 — (糞食甲虫) — 終宿主	豚 猪	胃
大 翼 豚 胃 虫				
馬 の 胃 虫		仔虫 — (ハエ幼虫) — 終宿主	馬	皮膚 胃
大 口 胃 虫	Habronema megastoma	イエバエ		
蠅 胃 虫	Habronema nwscae	イエバエ		
小 口 胃 虫	Habronema microstoma	サンバエ		
指 状 糸 状 虫			牛 山 羊	腹腔 脳
ギ ブ ソ ン 糸 状 虫			牛	皮下線
咽 頭 糸 状 虫			牛	頸韧带
馬 糸 状 虫			馬	腹腔
頸 部 糸 状 虫			馬	頸韧带
犬 糸 状 虫	Dirofilaria immitis	卵注: 仔虫 — (蚊トウゴマシマカ) — 終宿主	犬 猫 狐	心臓 尿管
メ デ ィ ナ 虫	Dracunculus medirensis	卵 — (ミジンコ) — 卵 —	人 牛 馬 犬 猫	皮下筋肉間
豚 肺 虫	Metostromylus apri	含仔虫卵 — (ミミズ) — 終宿主	豚	気管支
狐 肺 虫	Crenosoma vulpis	卵注: 経皮 仔虫 — (陸棲軟体動物) — 終宿主	狐	気管支
馬 肺 虫			馬	気管支
牛 肺 虫			牛 水牛 鹿	気管支
糸 状 肺 虫			羊 山羊	気管支
捻 転 胃 虫	Haemonchus contortus	卵 — 仔虫(ラプデティス型) — 感染仔虫(フィラリア型) — 終宿主	羊 山羊 牛	第4胃
オ ス テ ル タ ー グ 胃 虫	Ostertagia ostertagi		牛 羊	第4胃
蛇 状 毛 様 線 虫	Trichostrongylus	卵 — 仔虫(ラプデティス型) — 感染仔虫(フィラリア型) — 終宿主	羊 山羊 牛 駱駝	小腸 第4胃
	columbriformis			
東 洋 毛 様 線 虫	T. orientalis		人	小腸
ク ー ー 毛 様 線 虫	Cooperia curticei		羊 山羊	小腸 第4胃
犬 鈎 虫	Ancylostoma caninum	卵 — ラプデティス型 — フィラリア型 → 肺・気管支・咽頭・胃 → 腸	犬 狐 猫	小腸
ズ ビ ニ 鈎 虫	A. duodenale	経口 腸壁 → (肺) → 腸 終宿主	人	小腸
ア メ リ カ 鈎 虫	Nector owericanus	口内粘液腺 → (肺) → 腸	人	小腸
気 管 開 嘴 虫	Syngamus trachea	胎盤 肺 → 肺静脈 → 大循環系 → 胎仔	雞 七面鳥 野鳥	気管
気 管 支 開 嘴 虫	Cyathostoma branchialis	卵注: 経皮 卵 — 被囊仔虫…ミミズ、カタツムリ、ナメクジ、昆虫…終宿主 肺 → 気管	水禽	気管支
コ ロ ン ビ ア 腸 結 節 虫	Oesophagostomum	卵 — ラプデティス型 — フィラリア型 — 終宿主	羊 小羊	結腸
	columbianum			

寄生虫名	学名	発育型	終宿主	寄生部位
山羊腸結節虫			山羊 羊	結腸
牛腸結節虫			牛	結腸
豚腎虫 (=豚円虫)	<i>Stephacus dentatus</i>	卵(尿中) — 仔虫 — 感染仔虫 ^{経口} 終宿主 肝→腎	豚 猪	腎臓 胸腹腔
縷齒円虫				
細頸円虫				
普通円虫	<i>Strongylus vulgaris</i>	卵 — ラブデイス型 — フィラリア型 — 終宿主 肝→心→肺→動脈→瘤	馬	大腸 結腸盲腸
馬円虫(馬硬口虫)	<i>S. equinus</i>		馬	大腸 結腸盲腸
無齒円虫	<i>S. edentatus</i>		馬	大腸 結腸盲腸
トリヒナ施毛虫	<i>Trichoella spiralis</i>	仔虫 — 終宿主 ^{リバキオン腺—リンパ管—血管—躯体筋(筋トリヒナ)} =中間宿主 筋トリヒナ ^{経口} 終宿主(腸トリヒナ)	豚 哺乳類人	腸
毛細線虫	<i>Cooperia aciculata</i>	卵 — 仔虫 — 感染仔虫 — (ミミズ) — 終宿主	鶏	食道口素囊
	<i>Eucolus aerophilus</i>	卵 — 仔虫 — 感染仔虫 — 終宿主	狐	肺臓
	<i>Hepaticola hepatica</i>		鼠 犬	肝臓
犬糞虫	<i>Trichuris vulpis</i>	含仔虫卵 — 終宿主	犬 狐	盲腸
糞虫(毛頭虫)	<i>T. trichura</i>		人 霊長類	盲腸
ランソン桿虫	<i>Storonyloides ransomi</i>	虫(フィラリア型) — ① — 仔虫(ラブデイス型) — ② — 仔虫(ラ型) — 感染仔虫	幼豚	小腸胃
糞桿虫	<i>S. stercoraris</i>	仔虫(フィラリア型) フィラリア型	人	小腸
乳頭桿虫	<i>S. paillosus</i>	経口 終宿主	羊 牛 兔	小腸
蟯虫	<i>Enterobius vermicularis</i>	卵(会陰部) — 経口 → 終宿主	人	大腸 直腸
馬蟯虫	<i>Oxyuris equi</i>		馬	直腸 結腸
胎生蟯虫	<i>Probstmyria vivipara</i>	宿主体内でも増殖する	馬	盲腸 結腸
鶏盲腸虫	<i>Heterakis gallinae</i>	含仔虫卵 — 経口 → 終宿主	鶏 七面鳥	盲腸尖端
	<i>Heterakis dispar</i>		鶯鳥 鶯	
鶏回虫	<i>Ascaridia galli</i>	含仔虫卵 — 経口 → 終宿主	(幼) 鶏	小腸 盲腸
豚回虫	<i>Ascaris suilla</i>	同種異株 ① 含仔虫卵 ^{経口} 終宿主 胃腸→肺→気管→咽頭→胃→小腸	豚	小腸
回虫	<i>A. lumbricoides</i>		人	小腸
牛回虫	<i>A. vitulorum</i>	② 胎盤感染 腸→肝→肺→循環系	牛 水牛	小腸
犬回虫	<i>Toxocara canis</i>	非固有宿主の場合 肝臓 肺 脳	犬	小腸
猫回虫	<i>T. cati</i>		猫	小腸
馬回虫	<i>A. equorum</i>		馬	小腸

MINUTES OF DISCUSSIONS
ON
THE PROJECT OF THE ASEAN POULTRY DISEASE RESEARCH AND TRAINING CENTRE
IN
MALAYSIA

1. In response to the request made by the Government of Malaysia for the Project of the ASEAN Poultry Disease Research and Training Centre (APDRTC) (hereinafter referred to as "the Project"), the Government of Japan has sent, through the Japan International Cooperation Agency (hereinafter referred to as "JICA"), a team headed by Mr. Hiroshi MANABE, official of Ministry of Foreign Affairs, (hereinafter referred to as "the JICA team"), to conduct preliminary survey of the Project from 16th July to 26th July, 1985.
2. The JICA team has carried out a field survey, held a series of discussions and exchanged views with the relevant authorities of the Government of Malaysia.
3. A list of participants at the various meetings is attached as Annex I.
4. In the course of the preliminary survey, both sides confirmed the general objectives, the implementation agency and the site of the Project as follows:-

4.1 : General Objectives of the Project

The Project is to be carried out for the purpose of upgrading the level of research in poultry diseases, diffusing the research results and technologies to other ASEAN countries through training and thus contributing to the manpower development in poultry research in ASEAN.

4.2 Implementation Agency

Department of Veterinary Services, Ministry of Agriculture in collaboration with the Coordinating Group on Livestock of the ASEAN-COFAF.

4.3 Site of the Project

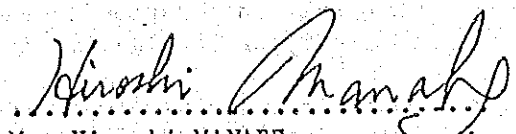
The ASEAN Poultry Disease Research and Training Centre (hereinafter referred to as "the Centre") is to be sited in the campus of the Veterinary Research Institute, Ipoh, State of Perak.

The Project involves 2 components, Japanese Technical Cooperation and Japanese Grant Aid.

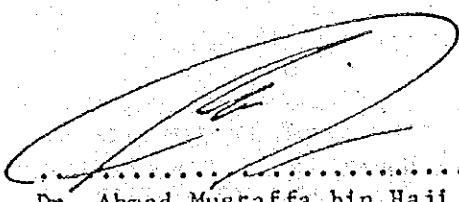
5.1 With regard to Japanese Technical Cooperation, both sides worked out the framework of the technical cooperation programme which is attached as Annex II.

5.2 With regard to Japanese Grant Aid, the Malaysian side understood the cooperation system as explained by the JICA team. Major undertakings by the JICA team and the Malaysian side were confirmed as shown in Annex III.

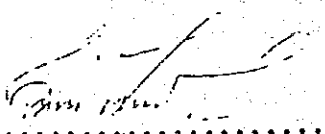
6. Within the above mentioned context concerning Japanese Technical Cooperation and Grant Aid, the JICA team and the Malaysian side agreed to recommend to their respective Governments to take further steps necessary for the implementation of the Project.



.....
Mr. Hiroshi MANABE
Leader of
Preliminary Survey Team
Japan International Cooperation
Agency
JAPAN



.....
Dr. Ahmad Mustaffa bin Haji Babjee
Director-General of
Department of Veterinary Services
Ministry of Agriculture
MALAYSIA



.....
Mr. Sopian bin Haji Ahmad
Witness
ASEAN-MALAYSIA
ASEAN Secretariat
Ministry of Foreign Affairs
MALAYSIA

Kuala Lumpur, July 24, 1985

List of Participants

The JICA Team

Mr. Hiroshi MANABE	Team Leader	Official, Grant Aid Division Economic Cooperation Bureau Ministry of Foreign Affairs.
Mr. Masatoshi NUMATA	Cooperation Policy	Official, Technical Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs.
Mr. Hiroyuki KANAZAWA	Cooperation Planning	Overseas Technical Cooperation Officer, International Cooperation Division International Department Economic Affairs Bureau Ministry of Agriculture Forestry & Fisheries.
Dr. Hiroshi HIHARA	Poultry Disease Research	Chief, Second Research Section, Poultry Disease Laboratory, National Institute of Animal Health Ministry of Agriculture Forestry & Fisheries.
Dr. Hidetsugu NAKAGAWA	Poultry Disease Diagnosis	Assistant Director Animal Health Division Livestock Industry Bureau Ministry of Agriculture Forestry & Fisheries.
Mr. Yoshihide TERANISHI	Grant Aid & Planning Management	Official, First Basic Design Study Division, Grant Aid Planning & Survey Department Japan International Cooperation Agency.
Mr. Ryusuke ISHIBASHI	Coordination	Assistant Director Technical Affairs Division Agriculture, Forestry & Fisheries Planning & Survey Department, Japan International Cooperation Agency.
Mr. Makoto NAKAMURA	Resident Representative JICA	Japan International Cooperation Agency, Kuala Lumpur Office.

The Malaysian Side

Mr. Yusof bin Hitam	Director General ASEAN-MALAYSIA ASEAN Secretariat Ministry of Foreign Affairs.
Mr. Soplan bin Haji Ahmad	Deputy Director II ASEAN-MALAYSIA ASEAN Secretariat Ministry of Foreign Affairs.
Mdm Wong Peg Har	Principal Assistant Director External Assistance Section Economic Planning Unit Prime Minister's Department.
Mr. Shaharuddin bin Mohd. Som	Assistant Director External Assistance Section Economic Planning Unit Prime Minister's Department.
Miss Roskina binti Haji Mohd. Salleh	Assistant Director Agricultural Section Economic Planning Unit Prime Minister's Department.
Mr. Kamaruddin bin Siaraf	Principal Assistant Secretary (International) Ministry of Agriculture.
Mr. Ab. Ghaffar bin A. Tambi	Assistant Secretary II (International-ASEAN) Ministry of Agriculture.
Dr. Ahmad Mustaffa bin Haji Babjee	Director General Department of Veterinary Services Ministry of Agriculture.
Dato' Dr. Haji Kardin bin Haji Shukor	Team Leader Assistant Director General (Animal Health) Department of Veterinary Services Ministry of Agriculture.
Dr. Abdul Rahman bin Mohd. Salleh	Director Veterinary Research Institute Ipoh, Perak.
Dr. P.G. Joseph	Deputy Director Veterinary Research Institute Ipoh, Perak.

Dr. Bahar bin Munip	Director Training and Career Development Department of Veterinary Services Ministry of Agriculture.
Dr. Heng Ngak Howe	Senior Veterinary Officer Department of Veterinary Services Ministry of Agriculture.
Mr. Yahya bin Muhamad	Research Officer International Desk Department of Veterinary Services Ministry of Agriculture.
Mr. C. Rajamanickam	Head Parasitology Division Veterinary Research Institute Ipoh, Perak.
Mr. Lo Honn Seang	Head Viral Vaccines Division Veterinary Research Institute Ipoh, Perak.
Mr. Lim Kean Taik	Head Avian Virology Division Veterinary Research Institute Ipoh, Perak.
Dr. Nor Aidah binti A. Rahim	Head Bacteriology/Mycology Division Veterinary Research Institute Ipoh, Perak.

Framework of Japanese Technical Cooperation Programme for the
ASEAN Poultry Disease Research and Training Centre

1. Activities of the Project

The Project is to be implemented through Project-type Technical Cooperation Programme and Third-Country Training Programme under the Japanese Technical Cooperation Scheme.

1.1 Research

Research activities on poultry diseases are to be carried out in the following fields:

- a) Virology
- b) Bacteriology
- c) Parasitology
- d) Pathology

1.2 Training

Training activities for ASEAN countries are to be carried out in the following areas:

- a) Seminars for senior veterinarians and scientists.
- b) Courses in basic diagnostic techniques for junior veterinarians, scientists and senior technical officers.
- c) Courses in specialized diagnostic techniques for junior veterinarians, scientists and senior technical officers.

NOTE

- (1) It is suggested that two (2) courses of one (1) to three (3) months duration are to be held annually.
- (2) It is suggested that a maximum of ten (10) trainees from ASEAN countries other than those from Malaysia are allowed to participate in each course.

2. Duration of Technical Cooperation

Five (5) years.

3. Measures to be taken by the Japanese Side

3.1 Dispatch of Japanese Experts

Two (2) long-term experts in the four (4) research fields, one (1) long-term coordinator and necessary short-term experts per year are to be dispatched. The fields of Japanese Experts would be as follows:

- a) Virology
- b) Bacteriology
- c) Parasitology
- d) Pathology
- e) Coordination

NOTE

The Team Leader will be nominated by JICA from among the above mentioned long-term experts.

3.2 Acceptance of Counterpart Personnel in Japan

Two (2) to three (3) counterparts and personnel of the Project are to be accepted annually in Japan for technical training and short-term study visits.

3.3 Provision of Equipment

Equipment, materials and instruments necessary for the implementation of the Project are to be provided within the budgetary allocation of the Government of Japan.

3.4 Provision of Third-Country Training

Provision of short-term training for the participants from ASEAN countries will be in accordance with the framework of the Japanese Third-Country Training Programme.

4. Measures to be taken by the Malaysian Side

4.1 Provision of lands for buildings and provision of facilities necessary for the implementation of the Project.

4.2 Assignment of necessary number of counterpart personnel and other administrative personnel.

4.3 Budgetary allocation necessary for the implementation of the Project.

4.4 Arrangement for the Third-Country Training Programme as the host country.

5. Establishment of Joint Committee

5.1 For the purpose of the smooth implementation of the Project, a Joint Committee is to be established consisting of:-

5.1.1 Chairman: Director General of the Department of Veterinary Services, Ministry of Agriculture, Malaysia.

5.1.2 Malaysian Side:

- a) Assistant Director General (Animal Health) of Department of Veterinary Services
- b) Director of Veterinary Research Institute
- c) Director of the ASEAN Poultry Disease Research and Training Centre
- d) Representative of the Economic Planning Unit, Prime Minister's Department

5.1.3 ASEAN Side:

Representative(s) of the ASEAN-Committee of Food,
Agriculture and Forestry (COFAF).

5.1.4 Japanese Side:

- a) Team Leader
- b) Coordinator
- c) Experts and Personnel to be dispatched
- d) Resident Representative of JICA Kuala Lumpur
Office.

NOTE

Official(s) of the Embassy of Japan and representative(s) of
ASEAN-MALAYSIA, Ministry of Foreign Affairs may attend the Joint
Committee as observer(s).

5.2 Functions of the Joint Committee

- a) To formulate annual work plan of the Project
- b) To review the Project activities
- c) To deal with other specific matters concerning the
Project.

5.3 Meetings of the Joint Committee

The Joint Committee shall meet at least once a year.

Major undertakings by the
JICA Team and the Malaysian Side

1. Undertakings by the JICA Team

The JICA team will convey to the Government of Japan the desire of the Government of Malaysia that the former takes necessary measures to cooperate in implementing the Project and bears the cost of the facilities and equipment requested by the latter within the scope of Japanese economic cooperation in grant form.

Facilities and equipment requested:-

- a) Main building for research, training and administration
- b) International Hostel
- c) Guest House
- d) Room for Electron Microscope
- e) Experimental chicken house
- f) Specific-Pathogen Free (SPF) Poultry Unit
- g) Equipment for poultry disease research and training.

2. Undertakings by the Malaysian Side

Upon the extension of the Grant Aid to the Project by the Government of Japan, the Government of Malaysia will take the following necessary measures:-

- a) To secure a lot of land and to clear, level and reclaim the site when needed;
- b) To provide facilities for distribution of electricity, water supply, drainage and other incidental facilities to the site when needed;

- c) To provide general furnitures (carpet, curtain, table, chair and others);
- d) To bear commission to the Japanese foreign exchange bank for banking services based upon the Banking Arrangement;
- e) To ensure tax exemption and customs clearance of the products purchased under the Grant at the port of disembarkation;
- f) To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contracts, such facilities as may be necessary for their entry into Malaysia and stay therein for the performance of their work;
- g) To maintain and use properly and effectively the facilities constructed and equipment purchased under the Grant;
- h) To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the internal transportation and the installation of the equipment.

JICA