



NEWS ITEMS

- AVIAN HISTOPATHOLOGY TRAINING SESSION This session is being held at the Camden Campus of Sydney University on the 21st & 22nd February, 1980. Anybody interested in participating who has not already contacted the Secretary should do so urgently.
- ANNUAL GENERAL MEETING & OVERSEAS SPEAKERS The annual general meeting will be held in March, probably in the week commencing 10th March and probably in Sydney. It is expected that Dr. H. Graham Purchase and Dr. Malcolm Reid may be visiting Australia at that time and will be presenting a seminar on Planning Poultry Research Investment, Leucosis and Marek's Disease Research Progress, and Coccidiosis. Further notices will be issued to members with details and information. The AVPA is supporting Dr. Purchase's visit and Elanco Products Company is supporting Dr. Malcolm Reid.
- SIMON ROBINSON of Pitman-Moore has left that organisation to join Pfizer Agricare Pty. Ltd., as Technical Manager. In this position he replaces Frank Hooke, also a member, who has been posted overseas.
- A number of positions for Poultry Veterinarians have recently been advertised.

VETERINARIAN MANAGEMENT POSITION A young growing poultry breeding organisation requires an experienced poultry veterinarian to take up a position involving the investigation of poultry health programs & to take management responsibility of technical service staff and some livestock production. This position offers a challenging opportunity to get in at the bottom of the ladder in a vigorous young poultry organisation. Experience in the poultry industry is essential. Salary will be related to the level of experience, but can be expected to be in excess of \$20,000 per year (plus company car) for a suitably qualified person.

Enquiries should be made to David Hazlett, (02) 605-5444 or in writing to: Hazlett's Dunrobin Poultry Stud, Kings Rd., Ingleburn. 2565.

- . TEGEL'S & INGHAM'S are looking for a number of veterinarians in different positions throughout the country. Enquiries should be made to Paul Macqueen at (046) 46-1001 for the Tegel's position and Rob Shapcott or David Kingston at (02) 606-5325 for the Ingham's positions.
- . CLIVE JACKSON'S old position at Glenfield is soon to be advertised.

NEW MEMBERS

Robert Dodemaide has recently joined Clive Jackson in the Weston's group. Robert is a veterinary graduate from Queensland and has worked in equine virology for some years. He will be establishing new laboratory services for the group at Marsden Park, west of Sydney.

Gordon Milliken, the Officer-in-Charge of the laboratories for Inghams, has recently joined the association and attended the last meeting.

Rod Watkins, who was a former member, has recently joined the Victorian Department of Agriculture in a Species Specialist (Poultry Veterinary Officer) position. Rod has had his own poultry processing plant in Victoria for some years and was previously a departmental veterinary officer. Prior to that, Rod worked in veterinary management positions in Golden Poultry Pty. Ltd.

Mike Hindmarsh, who has been with the Veterinary Research Institute, Department of Agriculture, has recently joined the association. It is understood that Mike has left the Department to take up varied interests, including production of game poultry.

Mike Manuel of the Tasmanian Department of Agriculture, is another new member. He has district responsibilities in an area where most of the broiler industry of that State is located.

Ron Mason, who is with the laboratory services of the Tasmanian Department of Agriculture, is another new member. Ron represented that Department at the last Poultry Diseases Subcommittee Meeting.

Rod Reece of the Victorian Department's Veterinary Research Institute has also recently joined. Rod has a particular interest in poultry histopathology and it is hoped that other members may be able to benefit from his expertise in this area, as he is only too happy to be consulted.

Mrs. Dinah Smith of the Veterinary Research Station, Glenfield who is the senior technician in the poultry laboratory there, has also been accepted as a member. Dinah will be known to many members of the association as a result of her years of work in the Glenfield poultry section. Dinah has just returned from revisiting the "old" country.

Upjohn Pty. Ltd. have contributed to sustaining membership again this year.

MONENSIN TOXICITY IN QUAIL

Following diagnosis of coccidiosis in some quail in a country district in N.S.W., medication with monensin at 100-120 ppm was commenced. About 3 weeks later 200 out of 500 quail had died and a further 200 were depressed. The toxicity has been reported previously (Vet.Rec. (1978) pp. 303 & 467). Monensin is contra-indicated for medication of game birds.

NEWCASTLE DISEASE VACCINE (V4) TESTING IN MALAYSIA

The last lot of reports from Dr. Latif who is conducting these experiments on behalf of the Australian Chicken Meat Research Committee, show that maximum protection from two doses of the vaccine administered by either Turbair spray or a domestic bottle spray was better than when the vaccine was administered by drinking water or the intranasal method. It must be understood that all these techniques of vaccination are at a laboratory level, but it does encourage support for the Turbair method of vaccination. Both spray vaccinations produced 100% protection against challenge by the intranasal route or by being placed in contact with infected birds.

Dr. Peter Spradbrow is at present in Malaysia conducting a trial using naturally infected (and uninfected controls) Australian birds supplied by Inghams Enterprises. These birds were transported by air to Malaysia and were challenged on arrival in that country. Peter has written indicating that the infected birds are resisting challenge while the controls are dying.

INFECTIOUS CORYZA

Robyn Wells recently conducted a phone-around to a number of larger layer farmers in the Sydney metropolitan area. She enquired as to whether the farmers recognised the occurrence of Coryza amongst their birds in the last 5 years and in the last 12 months. Of 15 farms able

to be contacted at short notice, 12 recognised the occurrence of Coryza during the past 5 years, and 8 of them recognised its occurrence in the past year. In most of the latter group of 8 they had the condition every year. This tends to confirm suggestions made by some industry veterinarians that 80% of layer farms in the metropolitan area suffer Coryza problems. In addition, some of the very large broiler breeder organisations have Coryza problems, and while medication and the possible development of a vaccine are short-term remedies, the high incidence of this infectious disease should be kept in mind when planning the location of future poultry enterprises. Dr. A.A. Bickford of the University of California has the following statement about vaccines against Coryza.

"Considering immunizing products, there have been some hopeful developments. With more knowledge of the antigenic components of H.gallinarum and the immune response it should be possible to do much better. The old yolk-propagated formalin - killed bacterins sometimes worked well but failures were frequent. Their shortcoming included lack of potency, restricted range of induced immunity and short duration of protection. More recently broth-propagated bacterins have been developed which apparently improve bacterial titer, induce protection to a somewhat broader spectrum of immunotypes of H. gallinarum, and assure a longer lasting immunity. This work was originated in Dr. Yamamoto's laboratory at UCD and was continued in Davis by Ortiz and Orozco and in Georgia by Davis and Rimler. Live coryza "vaccines" have also been developed for use only in known-infected multiple-age operations. They are usually propagated in the yolk sac of embryonating eggs and their use simply represents controlled exposure of pullets prior to peak egg production".

The full article is available from the Secretary.

PIGEON HEALTH

Kevin McManus of Intervet Australia (02) 439-3211 has a copy of the book "Health Pigeons" by L. Schragg costing \$19.25 which he had obtained for Steven Hunt, but which is now available to anybody interested.

WESTERN POULTRY DISEASE CONFERENCE

Your Editor has received a copy of an advanced notice indicating that the next Western Poultry Disease Conference normally held in California is to be held in Acapulco, Mexico. The Conference is being held on the 22nd - 26th April, 1980 (a month later than the usual dates for this

annual event). Any interested travellers should contact the Editor for details. The form includes an invitation to present papers at the Conference.

SOURCES OF SALMONELLA

Hacking, W.C. in the Can. J. of Comp. Med. (1978) 42:4 reported that Salmonellae were isolated from 23 of 412 feed samples, 6 of 35 new wood shaving samples and 44 of 267 used litter samples. These environmental and feed sources of Salmonella must always be kept in mind in proposals for control or eradication.

CHLAMYDIOSIS (ORNITHOSIS, PSITTACOSIS)

Despite all the name changes it is still the same disease. A recent article by Bevan et al in Avian Pathology, 1978, 7: 203 indicates a method of isolation of the organism using growth in cell culture. A recent outbreak of the disease in parrots in the Western suburbs of Sydney led to the identification of the condition in the owner, who was subsequently hospitalised for treatment which was successful. A large number of parrots died and the survivors were quarantined and treated with water soluble antibiotics. A review of the literature shows that a number of treatments are recommended, including the administration of millet seed treated with chlortetracycline. I have been unable to find details of the method of preparation of this mixture and there seems to be some doubt about the dose rate. Do any members have this information?

E. COLI - THE FUTURE PROBLEM

A paper by Goren in Avian Pathology, 1978, 7:213 reports on the development of models for infection by this organism. Two serotypes were used, one of which was capable of producing lesions only during the first week of life, while the other could produce lesions during the first 3 weeks. Natural resistance against these strains occurred after 1 and 3 weeks respectively. The epidemiological significance of the strain differences should be considered by all.

LEG WEAKNESS PROBLEMS

There is a good article by Terry in Poultry Digest for July, 1979 page 380, discussing viral arthritis and indicating the importance of clear diagnostic tests to distinguish between viral arthritis caused by Avian Reovirus and other causes of leg weakness problems.

ANOTHER NEW VIRUS?

Jones R.C. et al in Vet. Rec. 1979, issue of January 6th, page 22 discuss possible significance of Rotaviruses in turkeys and fowls.

INDEX OF SPECIAL INTERESTS - VETERINARY

Tom Hungerford has asked me to contact members who are interested in being placed on his index of special interests. Please write direct to T.G. Hungerford, Suite 93, Lincoln House, 180 Pitt Street, Sydney, 2000 with the following information: Christian Name: Surname: Degrees: Address: Phone No. Also indicate what headings of the special interest index you wish to be placed under.

MORE ON LIVER PROBLEMS

The following points have been made by Dr. Rod Reece of the Avian Diseases Section of the Veterinary Research Institute concerning the previous newsletter article on Fatty Liver Syndrome;

- 1) FLHS (Fatty Liver-Haemorrhagic Syndrome) is a life-threatening event for the individual birds and is fatal if severe.
- 2) The V.R.I. (Avian Section) sees approximately 250 groups of layers a year, comprising probably 1500 caged layer birds. By far the greatest problem encountered is fatty liver syndrome (FLS) which in summary is:-
 - 1) a sudden and dramatic drop in egg production (i.e. 85% to 50% in a few days) in birds well in lay; or
 - 2) failure to reach peak production;
 - 3) birds show a pale, large comb and some slight scurfiness, occasional outbreaks have slight neck moult and/or loose droppings;
 - 4) examination of dead birds rarely reveals gross liver rupture;
 - 5) affected birds are in good condition but definitely not obese and show signs of full ovarian activity;
 - 6) the outstanding feature is an enlarged fatty and friable liver, often almost orange in colour. Occasional small haemorrhagic systs (ecchymoses?) are seen;
 - 7) histopathology indicates focal hepatic reticulolysis (or a decrease in argolophilic activity of the fibres) and marked fatty

- 8) biochemical analysis of affected livers show a marked increase in total lipid with an absolute and relative increase in oleic acid (18:1) and a relative and absolute decrease in the essential fatty acids (linoleic acid and arachadonic acid), compared to unaffected livers (same strain, age, shed, diet, etc.);
- 9) treatment with choline chloride (water medication, feed addition or trough treatment) in many instances leads to a rapid return to normal production;
- 10) birds affected are mainly heavy, high producing cross-breds, but not always; it is a more common problem in hot weather, but does occur in winter; and proprietary pellets and crumbles as well as home mashes have been fed at the time outbreaks occur.

It would appear that what we call FLS in Victoria is distinct from FLHS and is not obesity. However, reviews on FLHS/FLS (Butler (1976) Avian Path. 5:1 and Meijering (1979) World Poultry Sci. J 35:2:79 do mention aspects of the condition as it is seen in Victoria so the aetiology of both conditions may be the same with different manifestations depending upon other factors.

Work is being undertaken by Drs. Gould and Sinclair on this condition and it is hoped they may significantly clarify many points."

MEBENDAZOLE RISKS

In a recent Vet. Rec. article Neave (Vet. Rec. 1979, 104:490) warns of the possible danger of using this anthelmintic for parrots and doves. He points out that it is dangerous to extrapolate from successful use in one species to a dose rate applicable to another species.

MAREK'S DISEASE

Berri Sinkovic reports that the addition of Trivettrin at the rate of 2 ml/100 ml of diluent to either HVT vaccine or MDV-19 vaccine has no effect on the titre of the vaccine. Berri had previously demonstrated similarly that the addition of lincomycin/spectinomycin to HVT suspensions did not significantly affect virus titre.

Berri has also indicated his interest in receiving specimens from apparent Marek's Disease breakdowns in the field.

ANTIBIOTICS IN ANIMAL FEED

Trevor Faragher has supplied the following information - "The Bacterial Zoonoses Branch of CDC, Atlanta, USA, has commented that the work by three groups (1-5) indicates that under certain conditions therapeutic feeding of antimicrobials to chickens can foster both Salmonella colonisation and enlargement of the pool of antibiotic resistant salmonellae. Some allowance should be made for those antimicrobials that are used to control specific diseases, but wherever possible, antimicrobials that do not promote antibiotic resistance to drugs important for human therapy should be used. Certainly the results of these studies argue against the use of antimicrobials that promote antibiotic resistance solely for the purpose of weight gain and food efficiency.

1. Smith H.W. & Tucker J.F. (1975) J. Hyg., Camb. 75: 275-292. The effect of antibiotic therapy on the faecal excretion of Salmonella typhimurium by experimentally infected chickens.
2. Ibid (1975) J. Hyg., Camb. 75: 293:301. The effect of feeding diets containing permitted antibiotics on the faecal excretion of salmonella typhimurium by experimentally infected chickens.
3. Ibid (1978) J. Hyg., Camb. 80: 217:231. The effect of antimicrobial feed additives on the colonisation of the alimentary tract of chickens by Salmonella typhimurium.
4. Evangelisti D.G. et al (1975) Antimicrob. Ag. Chemother. 8:664-672. Influence of subtherapeutic levels of oxytetracycline on Salmonella typhimurium in swine, calves and chickens.
5. Jarolmen H. et al (1976) J. appl. Bact. 40: 153-161. Effects of chlortetracycline feeding on the Salmonella reservoir in chickens."

NUTRITION - DISEASE INTERACTION

A human herpesvirus considered to be a variant of Avian Infectious Laryngo-tracheitis virus has been found by Inoue and Nishibe (Infection and Immunity, 1976, 14: 1:309. The virus is infectious to a strain of newborn mice and this paper reports that one ration fed to the dams enhances the incidence of disease, while another ration suppresses it.