

PROPOSED TRAINING SESSION IN POULTRY HISTOPATHOLOGY

Only a few applications for the proposed training course to be held during the August University Vacation in 1979 have been received. Anybody interested should notify the Secretary as soon as possible, otherwise the course will have to be abandoned for lack of interest.

NEWS ITEMS

- . The Secretary's new address (if re-elected at the next meeting) will be Division of Animal Health, Department of Agriculture, P.O. Box K220, Haymarket, 2000. Phone 217-6666.
- . Of 73 potential members 33 have paid their subscription for this coming year at the time of writing.
- . The Poultry Trade Exhibit, an important annual event in the industry, will be held at the Poultry Research Station, Seven Hills on 17th March 1979.
- . Bronwyn Runge (nee Dowling) has changed her name for the obvious reason that she has recently married.
- . Margaret McKenzie has recently become the mother of a baby daughter.
- . David Kingston is reported to be returning to Australia to take up a position in the poultry industry in N.S.W.
- . Balkar Bains has returned to Queensland and is now employed by Darwalla Poultry.
- . Robyn Wells (Mrs.), a recent graduate, has been appointed Veterinary Officer, Seven Hills to replace Ross Burton who has taken up a position as Veterinary Officer (Epidemiology) at the Veterinary Research Station, Glenfield.
- . An application for membership has recently been received from Dr. John Holder, whom many members will associate with the pig industry. John is now a consultant and is involved in housing and nutrition for both pigs and poultry.
- . Many members have had the opportunity to hear Dr. Brian McFerran and Dr. Latif bin Ibrahim discussing various viruses including Newcastle Disease Virus and Adenoviruses at a special seminar organised by the Australian Chicken Meat Research Committee in Sydney recently.
- . Applications for research grants from the two Industry Research Funds have recently been received, and the following statistical information may be of interest to members:

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The Australian Chicken Meat Research Committee has received 31 applications for new projects to a total value of \$380,000 of which 11 projects are of veterinary interest, totalling \$190,000.

The Poultry Research Advisory Committee has received 37 applications for new projects valued at \$550,000, of these 10 are of veterinary interest valued at \$134,000.

Four of the veterinary projects; valued at \$50,000 are applications made to both committees.

. A new publication "Australian Poultry Newsletter" has been put out by the Standing Committee on Agriculture as a result of recommendations from the Animal Production Committee. This is to be distributed to poultry extension, research and servicing groups throughout Australia. The first edition has recently been produced and it is on the subject of "Controlled Feeding of Pullets and Layers". It is understood that future editions will cover egg quality, and a list of poultry technical people in Australia. If you do not receive a copy you should contact either the Departmental Extension Officer in your State, or the Conference Group CSIRO, P.O. Box 225, Dickson, A.C.T. 2602.

MORTALITY IN PINK EARED DUCKS

This species of duck eats fresh water plankton and a mortality which occurs in the wild and also in captive ducks is being investigated by a number of workers, including Barry Munday of the Tasmanian Department and Clive Jackson of the N.S.W. Department. David Rushton and Frank Crome of the CSIRO Wildlife Research, Canberra, have initiated the investigation. Anyone with any experience or ideas could contact them. At the moment Vitamin A deficiency is suggested on histopathological examination of the kidneys.

IMPORTATION OF BIRDS INTO THE U.S.

Before 1972 there were no controls on importation of exotic birds into the United States. When it was discovered that exotic Newcastle Disease was coming in with these birds, a total prohibition was introduced for about 12 months. Introduction subject to conditions designed to prevent the introduction of communicable diseases of poultry was then permitted. This programme began in 1972 and since then over 700,000 birds have entered the United States. Birds are held in quarantine pending the result of tests to determine the presence of Newcastle Disease Virus or other viruses shown to be pathogenic for poultry by inoculation into four test turkeys and four test chickens. In this test, if no clinical signs of disease are observed, the virus is considered to be non-pathogenic for poultry, and the birds, if otherwise eligible, are released from quarantine. In 1977 10% of birds were refused entry because of the isolation of Newcastle Disease Virus. Since then, until May 1978, no

Newcastle Disease Virus was detected and no groups of birds were refused entry. To date, this programme has proven to be successful as no known cases of Newcastle Disease can be attributed to legally imported birds.

The Australian situation is vastly different as we are not in the position of attempting to restrict large quantities of formerly legal introductions across a land border. However, the success of the programme is interesting.

QUEENSLAND POULTRY PROBLEMS (See AVA Newsletter 2-1979-Page 17)

Vitamin A deficiency in commercial poultry is reported in 3 and 4 week old birds. This is a warning that vitamin deficiencies can still occur as three of these cases were in birds on commercial feeds.

Botulism in wild ducks and a few other birds are reported. 300 wild ducks died in one case. Rotting vegetation at the edges of a dam appears to have been responsible.

Pullorum disease has been noted to occur in a hen breeder flock in Queensland, details of the size of the flock were not provided.

Pasturella multocida was isolated from broiler chickens with scabby skin. An immunosuppressive effect of Bursal Disease Virus is suspected to have facilitated this infection.

Haemorrhagic Laryngotracheitis and Psittacosis were also diagnosed in Queensland.

IMMUNO-SUPPRESSION

An article on drug induced immuno-suppression in Lab-Lore, a publication put out by Wellcome Reagents Ltd., in Volume 8 No. 3, August, 1978, should be of interest to those concerned with Infectious Bursal Disease Virus and its effects.

ENGLISH POULTRY PROBLEMS

The Veterinary Record, June 3rd, 1978, Page 473, records an incidence of a marked increase in titre to the EDS 76 Virus in a commercial laying flock which suffered a fall in egg production and a concurrent soft shelled egg problem.

There is also a report of Tibial Dyschondroplasia affecting 20% of the batch of broilers on a property. Previous batches of similarations are said to be effected also.

Staphylococcal Arthritis of the Hock in 50% of layers was attributed to rough handling during the move from rearing to laying cages.

NEWCASTLE DISEASE VIRUS ISOLATED IN NEW ZEALAND

The Wallaceville Animal Health Reference Laboratory isolated an apparently non-pathogenic strain of Newcastle Disease Virus in February, 1978. The isolations were from 4 South Island poultry flocks. Serological surveys indicated that at least two of the major breeders of poultry in New Zealand are affected and similar isolates from wild ducks have been obtained. This finding confirms that the New Zealand situation is similar to that existing in Australia.

SALMONELLA

At the time of writing there is a report of severe food poisoning in Western Australia which has been attributed to frozen poultry contaminated by S. meunchen. In this regard it is interesting to know that the British Veterinary Association has found it necessary to comment on a report published by the British Association for the Advancement of Science and entitled "Salmonella - the food poisoner" in which they commend the publication but point out that they disagree with the reports linking the increase incidence of infections in livestock, particularly pigs and poultry, with intensive systems of livestock management. It was felt that it could equally well be attributed to increased monitoring over the past 20 years.

FUMIGATION OF POULTRY FEED WITH METHYL BROMIDE

Cooper et al (1978) in British Poultry Science 19:537-542 have reported on investigations of the effect of methyl bromide treatment for fumigation of poultry feed on egg flavour, egg number and egg weight. The work was done on Rhode Island Red females which were fed from hatching on diets fumigated with methyl bromide at the concentration recommended for elimination of Salmonellae or at 1½ times that value. Body weight, egg weight and egg number were not significantly affected by treatments, but sexual maturity may have been slightly delayed. There was some evidence of an adverse effect on egg flavour, particularly as detected by a trained sensory panel. These findings suggest that the methyl bromide should be suitable for SPF flocks.

Griffith et al (1978) in British Poultry Science 19:529-535 reported on the effects of methyl bromide treatment of feed on the flavour and acceptability of broiler meat. They found that broilers fed on commercial diets treated with methyl bromide gas at 69% and 25% over the recommended value for the elimination of salmonellae, were tainted. More than half the consumers in the home panel rated the control birds better than the birds fed on the fumigated food. Broiler growth was not affected by the treatment.

TWISTED LEGS IN BROILERS

Dutch workers, Hay and Simons (1978) in *British Poultry Science* 19:549-557 report on various factors influencing the incidence of leg abnormalities with particular reference to Twisted Leg in broilers. The incidence in males was twice that in females, the incidence in cages was higher than on litter, and type of cage floor had an effect. Broilers reared on floors of metal wire and perforated sheets had more leg problems than those reared on plastic mats and plastic covered wire. Vitamin and mineral supplementation had no effect on cage broilers, but a restriction of metabolisable energy (ME) intake during the first 14 days after hatching halved the frequency of leg abnormalities compared with those fed ad lib. It is suggested that lack of exercise increases the incidence of leg abnormalities.

CONTAMINATION OF DRINKING WATER IN BROILER HOUSES

Hurst, (1978) in the *Veterinary Record* May 27th points out that the use of cetrimide for control of contamination of drinking water may be dangerous because Pseudomonas aeruginosa is not affected by cetrimide and in fact cetrimide is used in selective media to permit the growth of the organism. He emphasises the importance of keeping dust out of the water and controlling algae by excluding light from tank and pipes. He recommends chlorine based compounds at a concentration of 50 mg/L available chlorine for disinfecting waterlines. Regular weekly dosing at 5 mg/L of available chlorine should prevent further trouble.

WET POX

Arthur A. Bickford, Extension Veterinarian, Davis, California, reports on the growing incidence of a severe respiratory disease, sometimes with a bloody respiratory discharge that kills 10-50% of previously fowl-pox vaccinated pullets during the early to mid lay cycle. It is rarely accompanied by characteristic skin lesions of Fowl Pox and is unresponsive to treatment or revaccination. It persists for 8-12 weeks in a flock. Only controlled environment houses have been affected. There is an increase in mortality with a few birds showing respiratory signs. Dead or sick birds may have a few skin lesions, but almost all have tracheal plugs (sometimes blood tinged). In early stages differential diagnosis from Laryngotracheitis and other respiratory infections can be difficult. Swollen watery eyes with cheesy exudate in the conjunctival sac, swollen sinuses containing cheesy exudate, or white to yellow plaques in the mucous membrane of the mouth, throat, oesophagus or crop can also occur. Virus isolation or microscopic examination of lesions are necessary for diagnosis.

It seems possible that a latent infection, perhaps with vaccine virus, might be activated under the type of housing concerned.

VETERINARY EPIDEMIOLOGY & ECONOMICS - 2ND INTERNATIONAL SYMPOSIUM

Members attention is drawn to this Symposium to be held at the Australian Academy of Science, Canberra, May 7th - 11th, 1979. Anyone interested should make application to the Secretary, 2nd ISVEE, Epidemiology Branch, Australian Bureau of Animal Health, Department of Primary Industry, Canberra, A.C.T. 2600.

BACTERIAL DISEASES ARE STILL A PROBLEM

In addition to the Pasturella infection reported earlier, the Editor has heard of several cases of Fowl Cholera in adult birds and also a case resembling Cholera from which the organism cannot yet be isolated. Your experiences may be useful to your colleagues.

Arthritis and Osteomyelitis have been reported associated with Staphylococcal Infection in birds housed on slats which have splinters in them. Treatment of new slats to eliminate splinters may be desirable.

AVIAN CHOLERA IN NEBRASKA

In April, 1978, 2400 birds (mostly coot) died as a result of an outbreak of Avian Cholera in one lake in the United States. Knowing how widespread the causal organism is in poultry in Australia, it would not be surprising for it to be involved in mortalities in wild birds here. I also have another report of a mortality from Avian Cholera involving 6750 birds at three sites in California. Again coots *Fulica americana* were the primary species affected.

TIBIAL DYSCHONDROPLASIA

Recent investigations by Rolf Howlett of the University of NSW and Bert Sheridan of NSW Dept. of Agriculture have shown an incidence of this condition in three strains of birds. As only one day's slaughtering was examined in each strain, the names are not mentioned, however, the results showed that one strain had a 35% incidence while the second had a 25% incidence and the third had a 15%. The results indicated that the incidence of bone breakages during processing were related to the incidence of the cartilage abnormality. If the broiler market starts to demand larger birds, it is possible that this condition may become more of a problem, as processing equipment appears to be more likely to break deformed leg bones on larger birds.